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What an extraordinary age is this for conventions! Now-a-days, if people only imagine something is the matter, they directly hold a convention, and resolve that the world shall be amended. We should not be surprised to hear next, of a convention of crows, resolving that the wicked practice of setting scarecrows in cornfields be henceforth abolished.

Sitting in our easy chair a few evenings since, we were quite surprised to see the door of our library open, and a small boy—dressed in dark green, who had something of the air of a locust or a grasshopper—walk in with a note.

It was an invitation to attend a mass meeting of all the fruits of America, assembled to discuss the propriety of *changing their names.* Horrified at the revolutionary spirit, we seized our hat directly, and bade the messenger lead the way.

He lost no time in conducting us at once to a large building, where we entered a lofty hall, whose dome, ribbed like a melon, was lighted by a gigantic chandelier, in the form of a Christmas tree, the lights of which gleamed through golden and emerald drops of all manner of crystal fruits.

In the hall itself were assembled all our familiar acquaintances, and many that were scarcely known to us by sight. We mean our acquaintances—the fruits. On the right of the speaker sat the Pears; rather a tall, aristocratic set of gentlemen and ladies,—many of them foreigners, and most of them of French origin. One could see by the gossipping and low conversation going on in knots among them, that they were full of little schemes of finesse. On the left, sat the numerous Apple family, with honest, ruddy faces; and whether Yankee, English or German, evidently all of the Teutonic race. They had a resolute, determined air, as if they had business of importance on hand. Directly behind the Pears sat the Peaches, mostly ladies, with such soft complexions and finely turned figures, as it did one's eyes good to contemplate; or youths, with the soft down of early manhood on their chins. Apricots and Nectarines were mingled among them, full of sweet smiles, and a honied expression about their mouths. The Plums were there, too, dressed in purple and gold,—many of them in velvet coats, with a fine downy bloom upon them; and near them were the Cherries, an arrant, coquettish set of lasses and lads,—the light in their eyes as bright as rubies. The Strawberries sat on low stools in the aisles, overhung and backed by the Grapes—tall fellows, twisting their moustaches (tendrils,)

and leaning about idly, as if they took but little interest in the proceedings. The only sour faces in the crowd were those of a knot of Morello Cherries and Dutch Currants, who took every occasion to hiss any speaker not in favor.

We said this was a convention of fruits; but we ought also to add that the fruits looked extremely like human beings. On remarking this to our guide, he quietly said,—"of course, you know you see them now in their spiritual forms. If you half close your eyes, you will find you recognize them all in their every-day, familiar shapes." And so indeed we did, and were shaking hands warmly with our old neighbors and friends,—the Beurrés and Pippins and Pearmains, when we were interrupted by the speaker, calling the meeting to order.

The Speaker (on giving him the *blink*,) we found to be a fine large specimen of the *Boston Russet*, with a dignified expression, and a certain bland air of one accustomed to preside. He returned thanks very handsomely to the convention for the honor of the chair; assuring them that having been bred in the land of steady habits, he would do all in his power to maintain order and expedite the business of the convention. We noticed, as he sat down, that there were vice-presidents from every state,—many of them old and well known fruits; and that the Le Clerc Pear and an Honest John Peach were the secretaries; and a pair of very astringent looking fellows—one a Crab Apple, and the other a Choke Pear—were sergeants-at-arms, or door-keepers. Their duties seemed to be chiefly that of preventing some brambles from clambering up the walls and looking in the windows, and a knot of saucy looking blackamoors, whom we discovered to be only Black Currants, from crowding up the lobbies; the latter in particular, being in bad odour with many of the members.

There was a little stir on the left, and a solid, substantial, well-to-do personage rose, who we recognised immediately as the Newtown Pippin. He had the air of a man about sixty; but there was a look of sound health about him which made you feel sure of his hundreth year.

The Newtown Pippin said it was needless for him to remark that this was no common meeting. The members were all aware that no ordinary motives had called together this great convention of fruits. He was proud and happy to welcome so many natives and naturalized citizens,—all bearing evidence of having taken kindly to the soil of this great and happy country. Every one present knows, the world begins to know, he remarked, that North America is the greatest of fruit-growing countries, (hear, hear,) that the United States was fast becoming the favored land of Pomona, who, indeed, was always rather republican in her taste, and hated, above all things, the fashion in aristocratic countries of tying her up to walls, and confining her under glass. He preferred the open air, and the free breath of orchards.

But, he said, it was necessary to come to business. This convention had met to discuss the propriety and necessity of passing an alien law, by which all foreigners, on settling in this country, should be obliged to drop their foreign names, or, rather, have them translated into plain English. The cultivators of fruit were, take them altogether, a body of plain, honest countrymen, who, however they might relish foreign fruits, did not get on well with foreign names. They found them to stick in their throats to such a degree that they could not make good bargains over such gibberish. The question to be brought before

this meeting, therefore, was nothing more nor less than whether things should be called by names that sounded real, or names that had a foreign, fictitious and romantic air; whether an honest man might be called in plain English a "good Christian," or whether he should forever be doomed to be misrepresented and misunderstood as a "*Bon Chrctien.*" For his own part, he said, he thought it was time to assert our nationality; and while he was the last man to say or do anything to prevent foreigners from settling among us, he did think that they should have the courtesy to drop foreign airs and come down to plain English, or plain Yankee comprehension. He was himself a "native American," and he gloried in it. He considered himself, though a plain republican, as good as any foreigners, however high sounding their titles; and he believed that if fruits would be more careful about their intrinsic flavor, and study, as he did, how to maintain their credit perfect and unimpaired for the longest possible period, it would in the end be found more to their advantage than this stickling for foreign titles. His ancestors, he said, were born in the state of New-York; and he was himself raised in a great and well known orchard on the Hudson. (Hear, hear.) If any gentleman present wished to know the value of a plain American name, he would be glad to show him, in dollars and cents, the income of that orchard. He was in greater favor in Covent Garden market than any English or continental fruit; and such sums had been realized from the sales of that orchard, that it was seriously proposed in the English parliament to impose a duty on Newtown Pippins, to pay off the national debt. (*Great applause, and a hiss from a string of Currants.*) He concluded, by trusting the chairman would pardon this allusion to his own affairs, which he only gave to show that a Pippin, in plain English, was worth as much in the market, and the world's estimation, as the finest French title that was ever lisped in the Faubourg St. Germain. He moved that all foreign names of fruits be done into plain English.

This speech produced a great commotion among the Pears on the right, who had evidently not expected such a straight forward way of treating the matter. For a moment, all was confusion. That little fellow, the *Petit Muscat*,—always the first on the carpet,—ran hither and thither, gathering little clusters about him. The *Sans-peau*, or Skinless, was evidently touched to the quick. The *Pomme glacé* gave all the Pippins a freezing look; and the *Fondante d'Automne*, a very tender creature, was so overcome that she melted into tears at such a monstrous proposition. The *Belle de Bruxelles* muttered that *she* had seen Newtown Pippins that were false-hearted; and the *Poire Episcopal* declared that the man who could utter such sentiments was a radical, and dangerous to the peace of established institutions.

Just as we were wondering who would rise on the opposition, a tall, well proportioned Pear got up, with a pleasant Flemish aspect. It was *Van Mons' Léon le Clerc.* He said he was sorry to see this violent feeling manifested against foreign names; and being a foreigner, and having had a pretty long acquaintance with foreign Pears abroad, he felt called upon to say something in their defence. He thought the remarks of the gentleman who had preceded him, both uncourteous to foreigners and unreasonable. He could not understand why people should not be allowed to retain their *names*, at least such as had any worth retaining, even if they did become rooted to the soil of this country. Especially when those names were in the most polite lan-

guage in the world,—a language which every educated person was bound to understand,—a language spoken by DUHAMEL and VAN MONS, the greatest of pomologists,—a language more universal than the English,—spoken, in short, in all civilized countries, and especially spoken by fine ladies, over a dish of fine pears at the dessert. (*Great applause.*)

Here a stranger to us, the *Bizi des Vétérans*, rose and said:—Sare, I have de honor to just arrive in dis country. I am very much *chagrineé* at dis proposition to take away my name. I have run away from de revolutions, what take away my property, and here I hope to find *la liberté—la paix;* and I only find *les voleurs*—robbers—vat vish to take away my name. Yes-sare; and what they will call me den?—"wild old mans," or "old sojair?" Bah! Me no like to be so, Moi, who belong to de *grand bataillon—le garde Napolion!*

Here a pleasant and amiable lady rose, evidently a little embarrassed. It was *Louise Bonne de Jersey.* She said she loved America. True, she had found the climate not to agree with her at first, and her children seemed to pine away; but since she had taken that hardy creature, the Quince, for a partner, they had done wonderfully well. For her own part, she had no objection whatever to being called "Good Louise," or even "Dear Louisa," if her American friends and cousins liked it better. All she asked was to be allowed to live in the closest intimacy with the Quince, and not to have any *cutting* remarks made at her roots. She could not bear that.

A very superb and stately lady next rose, giving a shake to her broad skirts of yellow satin, and looking about her with the air of a Duchess. In fact, it was the *Duchesse d'Angoulême;* and though she was a little high shouldered, and her features somewhat irregular, she had still a very noble air. She remarked, in a simple and dignified voice, that she had been many years in this country, and had become very partial to the people and institutions. Naturally, she had strong attachments to old names and associations, especially where, as in her case, they were names that were names. But, she added, it was impossible to live in America without mixing with the people; and it was impossible to mix with the people, if one's very name could not be understood. It was very distressing to her feelings to find, as she did, that French was not taught in the common schools; and she hoped if an agricultural college was established, the scholars would be taught that language which was synonymous with everything elegant and refined. She trusted, in conclusion, that though names should be anglicised, the dignity would be preserved. A Duchess, in name at least, she must always be; but if republicans preferred to call her simply the Duchess of Angouleme, she saw nothing amiss in it. Especially,—she remarked, with a slight toss of the head,—especially, since she had heard an ignorant man, at the country-seat where she resided, call her repeatedly "Dutchy-Dan goes-lame;" and another, who visits him, speak of her, as "Dutch Dangle-um," forgetting that she abhorred Holland.

She was followed by the *Red Streak Apple*, from New-Jersey, a very blunt, sturdy fellow, who spoke his mind plainly. He said he liked the good sense of the lady who had just spoken; she was a woman he should have no objection to call a Duchess himself. About this matter he had but few words to say. Some folks were all talk and no *cider;* that, thank God! was not his fashion. What he had to say he said; and that was, that he was sick of

this tomfoolery about foreign names. A name either meant something or it did not. Anybody who looked at him could see that he was a Red-Streak, and that was all that his father expected when he named him. Anybody could believe that the last speaker was a Duchess. But what, he should like to know, did the man mean who named a Peach "*Sanguinole a chair adherent!*" He should like to meet that chap. It would be a regular raw-head and bloody-bones piece of business for him. And "*Fondante du Bois;*" he supposed that was the fond aunt of some b'hoys,—it might be the "old boy," for all he knew. And "*Beurré Gris d'Hiver nouveau.*" Could anything be more ridiculous! He should like to know how those clever people, the pomologists, would translate that? They told him, "new gray winter butter," (*laughter;*) and what sort of winter butter, pray, was that? "*Reine de Pays bas;*" what this meant, he did not exactly know,—something, he supposed, about "rainy weather pays bad," which would not go down, he could tell the gentlemen, in our dry climate. There was no end to this stuff, he said. He seconded the Pippin. Clear it all away; boil it down to a little pure, plain English essence, if there was any substance in it; if not, throw the lingo to the dogs. He hoped the Pears would excuse him. He meant no offence to them, personally. But he did'nt like their names, and he told them so to their faces.

The *Minister* Apple here observed that he had some moral scruples about changing the names of all the fruits. It might have a bad effect on the hearts and minds of the community. He begged leave to present to the speaker's consideration such names, for example, as the "*Ah mon Dieu,*" and the "*Cuisse Madame*" Pears! There were many who grew those Pears, and, like our first parents, did not *know* the real nature of the fruits in the garden. Happy ignorance! Translate them, and they would, he feared, become fruits of the tree of knowledge.

A tall *Mazzard* Cherry hereupon remarked, (wiping his spectacles,) that a very easy way of avoiding the danger which his worthy friend, who had just sat down, had pointed out, would be to reject both the Pears and the names, when they were no better than the last. He was a warm friend to progress in horticulture, and he was fully of the opinion of the Jersey Red Streak, that things should not come among us, plain republicans, in disguise. How, indeed, did we know that these Pears of France were not sent out here under these queer names for the very purpose of corrupting our morals; or, at least, imposing on us in some way. He had been settled in a garden for some years, among a pleasant society of trees, when last spring the owner introduced a new Pear from abroad, under the fine name of "*Chat brulé.*" For some time the thing put on airs, and talked about its estate and chateau having been destroyed by incendiaries; and it showed a petition for charity. What was his amazement, one day, when the daughter of the proprietor came in the garden, to see the contempt with which she turned away from this Pear, and exclaimed, "what could have induced pa to have brought this 'singed cat' here?" *Chat brulé*, indeed! He bent over the creature and switched her finely the first stormy day. He was for translating all good fruits and damning all bad ones. (At hearing this, certain second rate Strawberries commenced *running.*)

The convention grew very excited as the Mazzard sat down. The *Muscat Noir* Grape looked black in the face; the Crown Bob Gooseberry threw up his hat; and the Blood

Peach, who had been flirting with a very worthless fellow—the French soft-shelled Almond—turned quite crimson all over. Cries of "order, order," were heard from all sides; and it was only restored when a little, plump, Dolly-Varden looking young girl, who was a great favorite in good society, sprang upon a chair in order to be seen and heard.

This was the Lady Apple. Her eyes sparkled, and set off her brilliant complexion, which was quite dazzlingly fair. It was easy to see that she was a sort of spoiled child among the fruits.

Mr. Speaker, she said in a very sweet voice, you will indulge me, I am sure, with a very little speech—my maiden speech. I should not have ventured here, but I positively thought it was to have been a private party, and not one of these odious mass meetings. I am accustomed to the society of well bred people, and know something of the polite languages of both hemispheres. Indeed, my ancestors still live in France, though I am myself a real American. What I have to tell is only a little of my own experience; which is, that one may, if one has good looks, and is a person of taste, have her name changed without suffering the least loss of character or reputation. Indeed, I am convinced it may often add to her circle of admirers, by making her better understood and appreciated. I am almost ashamed, ladies and gentlemen, to refer to my own life, illustrative of this remark. (*Cheers.*) [Here she blushed, and looked around her very sweetly.] At home, there in *la belle France*, I belong to the old and very respectable family of the Api's. There was not much in that; but mostly shut up in an old dingy chateau,—no society—no evening parties—no excitement. I assure you it was very dull. In this country, where I am known everywhere as the "Lady Apple," I am invited everywhere among the most fashionable people. Yes, Mr. Speaker, this country has charmingly been called the paradise of ladies; and I would advise all deserving and modest girls in *jeune France*, to come over to younger America, and *change their names* as quickly as they can. (*Hear, hear*, especially from the *Jonathan* Apple.) If they will take *my* advice, they will put off all foolish pride and fine names that mean nothing, and try to speak plain English, and dress in the latest republican style; (especially,—she added, *aside*, turning to the foreign Pears,—especially as the fashions always come from Paris.)

This lively little sally evidently made a favorable impression. The Bartlett Pear said he was nobody in France as the *Poire Guillame*, while here, where the climate agreed so much better with his constitution, he was a favorite with high and low. The *Duchesse d'Orleans* thought it best for ladies like herself, who did not expect to associate with any but the educated class, to retain their foreign names. The *Jargonell* Pear said he had heard a great deal of talk, which to him was a mere babel of tongues. His name was the same on both sides of the water. The Flemish Beauty said, on the other hand, that she was a great deal more loved in this country now, than when she first came here as the *Belle de Flandres*. The *Bellefleur* Apple observed, she had tried to maintain her foreign etymology in this country without success, and meant to be henceforth plain Bellflower; and the *Surprise* Apple turned red, as he attempted to say something (the Morello trying to hiss him down;) but he was only able to stammer out his astonishment that any one could doubt the policy of so wise a movement.

There was here a tumult among some

of the foreign Grapes, accustomed to live in glass houses, who had been caught by the Crab Apples *stoning* the windows, and sticking their spurs (they were short pruned vines,) into some patient looking old *Horse* Apples from the western states. A free-soiler, who was known as the *Northern Spy*, was about to sow the seeds of the apple of discord in the convention, by bringing forward an amendment, that no foreign fruits, and especially none which were not "on their own bottoms," should be allowed to settle in any of the new states or territories, when that old favorite, the Virgalieu Pear, made a soothing speech, in his usual melting and *buttery* manner, which brought all the meeting to a feeling of unanimity again; when they resolved to postpone further action, but to prepare a memorial on the subject, to be laid before the Congress of Fruit-growers, at its meeting next fall in Cincinnati.

PRESERVING FRUITS, FRESH FOR WINTER USE.

BY W., BALTIMORE.

[We commend the following to the memorandum books of those of our readers who aim at the choicest results of domestic economy and housekeeping. We have tasted peaches in mid-winter, preserved at Baltimore, after this method, which, cut up and served with cream at the dessert, were almost undistinguishable in appearance and freshness of taste from August rareripes fresh from the tree. We are assured the same results are obtained with strawberries, apricots, plums, &c., which are now extensively prepared in this way for market. As the process is a very simple one, we do not see why this mode of preserving the fruit, with its natural flavor, should not largely supersede the cloying preserves, made with sugar. Ed.]

Dear Sir—In answer to your queries, regarding the mode of preserving fruits practiced in this city, I send you the following, as that after which the specimens you tasted were prepared:

Send to your tinsmith and get a sufficient number of tin canisters, very carefully and tightly made. They should be of uniform size; and the shape preferred here is seven inches high by five inches in diameter—uniform cylinders.

Select the fairest fruit,—peaches, strawberries, or what you please. It should be *just* ripe, but not past the mature stage. Fill the canisters, place the tin lids on their tops, and solder them down very carefully. Only a small hole, of the size of a pin, should be left for the escape of air.

The next point is to drive the air out of the canisters of fruit, to prevent its decay. In order to do this, take a broad boiler-pan, (with a flat bottom,) place the canisters in it, and fill it with boiling water within about three-fourths of an inch of the tops of the canisters. The boiler being over a *gentle* fire, the water in it should now be made to boil. This will drive the air in each canister through the small hole left in the top, as soon as the temperature approaches 200°; and in order to know precisely when it is all expelled, you must drop a few drops of water upon this hole. When the bubbles of air cease rising through these drops of water, the air is all expelled, and then you may pass a dry cloth over the hole and let a drop of solder

fall upon it. This seals the canister up, hermetrically, so that the fruit will remain unchanged for a couple of years, or longer. The immersion of the cans in the boiling water does not impart the slightest taste of their having been cooked to the fruit.

The canisters of fruit should be left in a cool place. When wanted for use, unsolder the tops with a hot iron and the fresh fruit is ready,—having been perfectly preserved without the aid of sugar or brandy.

Yours, W.

CRITIQUE ON THE DECEMBER HORTICULTURIST.

BY JEFFREYS, WESTERN NEW-YORK.

Your Leader—Agricultural Schools.—If the farmers of our country *do* wake up to their own interests, as late appearances indicate, they may at least succeed in putting themselves, as a soldier would say, *in position.* Of all professions known in our land, the farmer is the only one who steadily opposes his own interest in improvement. The lawyer, the doctor, the merchant, the statesman, the politician, the mechanic, the artisan,—in fact, the disciple of every profession *but* agriculture, is actively awake to his own improvement in all that appertains to his craft. But the farmer's knowledge "comes by nature," and he has no need of education in his own profession, if his words and acts are to be believed for the *few* centuries in which he has existed. And even now, when the other professions are eager to help him into a school for his own special benefit, the chances are equal that he will, donkey-like, let fly his heels in its face, instead of making an effort to effect it.

I don't mean to be disrespectful, Mr. Editor; but when I hear farmers—men who are indebted to the soil for all that they are, and look to it for all they expect, and ought to know the value of practical agricultural education—voting in legislature against every proposition for their own good in that line, for fear it will make "book farmers" of their boys, and yet supporting bank charters in shoals, railroads by the score, and all sorts of corporate privileges as a matter of course, I do think that *we* farmers—yes, I claim to be part of one myself—are a *very* consistent body of gentlemen. Thanks to our new Constitution, *special* bank, insurance, turnpike, and manufacturing corporations are at an end; and everybody can have them by *general* law that want them; and when our railroads shall be created by general law, too, as they soon will be, I trust that such of those among our farmers who *do* wish to get a very incompetent (as it will be,) share of state consideration for their just benefit, may be heard.

Governor Fish deserves the thanks of every farmer in the state for his liberal recommendation of the endowment of an agricultural school; and I trust that the efficient and intelligent board of commissioners which he has appointed to draft a plan, will present such an one to the legislature that they will at once adopt it. For fifteen years past the state agricultural society have recommended it; and last winter, for the first time, have they been able to bring the subject to a notice in the executive message. Your remarks on this subject are well timed, and to the point. It is true that a school, if one be now established in this state, is to be an experiment in the

United States,—the first to be created by law, and endowed at the expense of the treasury. It will require caution in its plans, and in the execution of its duties, until the right method of instruction be understood; and then, if successful agricultural schools are to become the chosen institutions for the mass of our young men, for the reason that, if not absolutely *necessary* to all, the pursuit of agriculture is so congenial to the feelings, tastes, and leisure of man, that it will be regarded as *an accomplishment* in the education of one's youth, by our most intelligent people out of the great commercial cities, and by very many within them. Success to the effort; and meantime, I shall look with anxiety for the report of the commissioners, who, I trust, have well discharged their duty.

The Evergreen Ivy.—Mr. Smith, you are a man of true taste. I won't say more, just now. How many old rookeries of houses, nestled under a high rock, an ancient tree, with a sparkling brook hard by, have I seen, with the old ivy climbing up their dilapidated sides, and spreading over their mossy roofs, that looked infinitely more home-ish than the starched up, martin-box affairs, in such dapper colours, on the road side just beyond them. Ivys are beautiful always; and in every spot requiring seclusion, no screen so cheap and so becoming can be substituted. The American ivy is hardly so rich in its drapery and foliage as the English; but sufficiently so to form an attractive object in almost every ground; and it is only to be wished that our country people better understood its worth, not only in ornamenting their own dwellings, but many otherwise unsightly, yet necessary, structures, which stare out in their naked deformity in a thousand places,—thus giving them an appearance at once graceful and appropriate.

A Chapter on Birds—and by a new "Ornithologist." Welcome, my good friend, into the kind brotherhood of those who love God's creatures. I am sorry, however, you don't like the wrens. Of all things, I like them for their very spider eating. The spiders! Bless me, my good sir, they are the bane, not exactly of my own, but all summer they are of my good wife's existence. Why, you know nothing about it. Every other day, from April to November, you see her with handkerchief, tied turban fashion round her head, out in the broad piazza, with Tom and his brush, and Moll with her stick, and the dear soul with the tongs to pinch them,—all clamorous and busy for an hour in poking out, and brushing off the "filthy spiders." And such a time!—and over the windows, and all about. Why, I wish we had a thousand wrens to catch the vile torments. Blue birds, robins, sparrows,—all may go, if the wrens will but catch the spiders. No, my good sir, let us have them all. There is room enough for wrens, as well as the others. And they look so smart, with their tails stuck up so brisk, and their funny little eyes, so sharp, peering into every crack and crevice for a bug, a fly, or a spider. Let the large birds have the grubs and the beetles, of which there are enough to serve them a turn; and if you love the drone of the dear little humming-bird, plant a scarlet monthly honeysuckle by the columns of your porch, or library, or bed-room window, and the tiny things will be all day boring into the long cups of the flowers, and perchance fly into the windows; and in its fright to get out again, one will dash against the glass, where, in order to release it, you will catch it as you would a butterfly; and while holding it in your hand, and gazing at its delicious plumage, will feel its tiny heart throb against your fingers in its ago-

ny, till you let it go into the broad sunshine of its enjoyment, soon to return and buzz away its happy hours as before.

How many bright and pleasant hours may be spent in ministering to the wants and the pleasures of the birds, thus kindly attracted about one's dwelling and grounds; and what lessons of love and affection may be taught the children in caring for their welfare, and watching their habits,—all incidents of rural life, that serve to make up its variety and pleasure. But I grow garrulous. Write again, my dear sir. You remind me of WHITE, of Selborne, who wrote some years ago one of the pleasantest books I ever read, on the Natural History of his neighborhood.

A Jog in the Fruit Garden.—I cannot say a word to assist our "Digger." He so effectually finishes up his subject, whatever it be, that, like the clerk in the parish church, I can only respond "Amen" to his conclusions. I may possibly catch him napping by-and-by, when I promise him he shall hear from me in as hearty earnest as he lectures the neophytes and the slovens in the garden or the orchard.

Design for a Rural Villa—with a view in the frontispiece.—Here, Mr. Downing, you have it—a house that suits me, in *outside* appearance, almost exactly. It has a good hearty look of hospitality and substance about it, that seems to tell of itself what it was built for,—like a stout, honest, country gentleman, with his broad hat and portly bearing, who breathes free and deep, as he walks out upon his domain; not a starched up, affected, meager faced, pedantic body, who appears in shivering doubt whether the country, after all, is really the place for "genteel society."

I *must* talk a little about this house; and while I extol its excellencies, you must excuse me if I suggest what might, under certain circumstances, improve its general effect, and make it the very thing I would build myself when I have the occasion, and the means. The main body of the house is almost, perhaps quite, perfect. Its broad, liberal size; its sufficient, yet comfortable height; its well pitched, ample roof, widely protecting the walls from damp and frost; its high, upright gables, giving light, shape and convenience to the chambers; the several chimney stacks above, telling of cheerful, social firesides within; the massive porch in front, with open, inviting passage, and well fitting connection to the roof in subordinate capacity; the broad, yet neat veranda, covering the *whole* front, and resting back upon the tasty green-house, and spacious, wholesome kitchen, which so appropriately support it; and then its capacious and well arranged family bed-room, on the ground floor within,—are all features which mark this house a fitting and appropriate residence for an American country gentleman of any fortune or condition whatever.

It is excessively annoying to one who has a correct and substantial notion of country life. to see the artificial style, or fashion of the day, so prevalent in *amateur* retirement. A house, fantastic in shape; groined, buttressed and arched in all possible ways and directions; with finical gew-gawgery stuck on in every possible place where it can stick, or hang; and all so pinched up, and stiff, and finical without; and a perfect toy-shop within, looking so inhospitable—no matter how open may be the heart of the man—that it is enough of itself to freeze up all the kindly qualities of one's existence, as he looks upon it in contrast with the specimen before us. Why, there is more true hospitality and enjoyment in the pork and cabbage, with a glass of bottled cider, of the last, than in all the turtle

soup and champaigne of the former. *Great* men don't live in such "fancy" houses, anywhere in these United States.

I know a gentleman who has been a general, a governor, a cabinet minister, a foreign ambassabor, and possessed of an ample fortune, and, withal, a man of great hospitality, whose house never cost him five thousand dollars. But its ample and convenient rooms are filled with abundant and most comfortable furniture; a large library, costly and beautiful paintings, maps, and drawings; cabinets of minerals, ancient coins, and superscriptions; and all the choice things and bijouterie that a gentleman of education and taste would naturally pick up in foreign and domestic travel; yet all beautifully arranged, and so carelessly disposed, that not the slightest effort at effect is discovered, and at the display of which the plain, unsophisticated, matter-of-fact man is no more disconcerted than in entering the sitting-room of an ordinary farmer. And still, there is comfort in every degree, without ostentation or effort; and this house which you have designed is the very one for such a man, or for one of his finished, yet unpretending taste, to build and to live in—plain—substantial—home-like—and in harmony with all you desire within, or about it.

Allow me, however, to suggest an improvement. In looking at the grounds in its vicinity, I catch a glimpse of a lake, or river, in the distance, on which the rear of the mansion looks out, and, of course, the house itself is an object from the water, or its shores; and the upright, and apparently stiff, uncovered rear, presents a naked appearance to the eye. Therefore, allowing the green-house and kitchen their present positions, the library should be slightly curtailed in its length, and a light veranda thrown out on each side,—thus letting the walls gracefully down to the ground as in front, and giving them appropriate shelter. A narrow side door for summer use could communicate from either wall of the library with this veranda, and in winter closed by an outer screen, or blind to keep out the cold and the weather. Or if more convenient to the occupation of the grounds, the kitchen could turn an angle rearwards, from which might be extended the wash-room, laundry, wood-house, &c. &c.—thus giving a finished and most convenient appearance to the whole structure—a perfect homestead.

I trust I may never see another *cellar* kitchen to a country house,—the bane and affliction of our wives; for in this country, where the occasional superintendence of the kitchen is indispensable to all good housekeepers, that department should always be within reach of the family rooms; a ready method of *housekeeping made easy.*

Vail's August Duke Cherry.—If this fruit is all that you describe, it is an acquisition invaluable to our pomology. Let it be thoroughly tried in our nurseries; and if, like the pudding, "the proof is in eating," it will be abundantly disseminated throughout the country.

Bursting the Bark in Cherry Trees.—Go on, gentlemen. You are doing "the state some service," and ere long they will "know it." I shall hold up till you get through, and then, possibly, have a word or two to say about it.

On Grape-vine Borders.—Dr. Stevens knows a thing or two. And I am right glad he has broached this subject. When you and he have settled this matter of width of border, and depth of soil, the draining and moisture—any man of good observation can determine—we'll go to work and raise them in any quantity for domestic market. At all events, no more delicious

or admirable fruit can be offered to our palates than the grape; and they must—it's a settled question—be grown in vineries.

New Fruits of South Carolina.—It being, in my mind, "a settled fact," that every climate must grow *indigenously* its own *best* fruits for *ordinary* cultivation, our southern friends can do no better than to produce from their seedlings the fruits they require. I am glad to see they are at work in this important branch of their luxuries.

At Saratoga, where I was two years ago, at the state cattle show, a gentleman, connected with the pomological exhibition, brought down a basket of delicious plums from the show grounds, which he distributed among the guests at the dinner table of one of the fashionable hotels. I overheard a lady, to whom some of them were presented, remark, that she should preserve the stones and carry with her to South Carolina, where she intended to plant them. I trust she will receive a good account from them.

I have little doubt that, twenty years hence, our southern states will be well supplied with indigenous fruits, of the kinds now so easily cultivated with us, provided they give the requisite attention to it. Mr. SUMMER is entitled to the thanks of his friends and neighbors for his zeal in this department.

The Camellia Japonica.—Not knowing much about it, only as I admire its pure and delicious flower in a lady's hair, I shall, more wisely, let it alone.

On Indian Corn.—If Carlyle, like Cobbett, in his day, would only consent to write *English always* as he does now, he would be one of the most attractive authors of the day. Yet despite his vile transposition of his native tongue, I like him; and this essay on our Indian corn is valuable, and to the purpose. *We* can feed England, Scotland and Ireland cheaper and better on *our* corn, so far as required, than they can be fed in any other way; and when so simple and effective a method can be employed in drying it as we have at home, I am astonished that those "in the trade" do not at once establish works for its necessary preparation.

This article will do good in our country by drawing attention to the subject; and as Mr. Carlyle has condescended, in this instance, to write intelligible English, he may, by its success, be won into the exercise of his vernacular on other subjects. Suppose he should, for variety, attempt it.

Trees in Towns and Villages.—The best thing I have seen in a long time. Every village newspaper ought to publish this article, and every country dweller ought to lay it by for reference spring and fall; for no such man does his duty to his family and the world who does not plant a tree. Had I not already occupied so much of your paper with my gossipping "critiques," I would give you a chapter on trees. I love, aye, I always loved them,—from the old mulberry, that shaded the window through which I first saw the light, to the broad old butternut, that rattled down its kerneled fruit over the old brown school-house, where I recited the "shorter catechism," and the noble elms, oaks and walnuts, under whose grateful shadow I now lie down in summer to gaze at my grazing brood mares, and cattle, and sheep, as they gather around me—whew! I must be careful, or they'll scent me out. Another day we'll talk of the trees, when the gaping olfactories of your readers are in better trim than now.

JEFFREYS.

A BOTANICAL ACCOUNT OF CALIFORNIA.

[We borrow the following article from the Journal of the Horticultural Society of London. It was written by Mr. Hartweg, a botanical collector, employed by the society to explore Mexico and the coast of the Pacific some time ago. His journey in California took place in 1846; and he wandered through the valley of the Sacramento without a dream of the wonderful changes which a couple of years would make in the destiny and appearance of that country.

Of the beautiful California Horse Chestnut and the Evergreen Oak, described by Mr. H., we trust some of our California adventurers, returning home, will bring pockets full of seeds, that a trial may be made of their fitness for adorning pleasure-grounds here. Ed.]

I left Mazatlan on the 11th of May, and arrived at Monterey on the 7th of June, after a passage of twenty-six days.

The verdant fields and pine-covered range of mountains at the back of the town form a pleasing contrast to the dried-up vegetation about Mazatlan. The predominating trees are an evergreen oak (Quercus californica,) forming a tree thirty feet high, with a globular crown, and having the branches much distorted. It occurs principally in low but dry situations. The higher parts are occupied by Pinus insignis, a tree 60 to 100 feet high, with a stem of two to four feet in diameter. This species is liable to vary much in the size of the leaves (which stand in threes) and in the cones, according to local circumstances. In close woods, a mile or two from the sea-shore, at an elevation of 200 to 300 feet, the leaves usually measure four and a half to five and a half inches, and cones four to four and a half inches in length by two and a half broad; towards the beach, where the trees are mostly one-sided—a defect caused by northwest winds, which blow for the greater part of the year—both leaves and cones diminish in size. These differences, which are too insignificant to establish even varieties of Pinus insignis, have given rise to the names Pinus tuburculata and radiata, which were, according to Loudon, collected by the late Dr. Coulter near the sea-shore at Monterey; that locality, no doubt, is Point Pinos, as it is the only habitat near Monterey where pines grow close to the beach; it is at the same time the place where I made the foregoing observations. In all situations the cones grow three or four together in a cluster, remaining on the trees several years after shedding the seeds; are pendulous, with the apex somewhat recurved; deformed, that is, the scales on one side are more developed than on the other, and enclose two winged seeds under each scale. The cones are about eighteen to twenty-four months in ripening.

On the dry banks of ravines, to the northeast of the town, the Californian horse chestnut (Pavia californica,) is common. This extremely ornamental shrub or low tree rises to the height of twenty-five feet, is of a globular shape, and produces its fragrant whitish flowers of a delicate pink hue in great abundance on spikes twelve inches long; one of these spikes, which I had the curiosity to count, had more than 400 open flowers and buds upon it. Of shrubs I observed Ceanothus thyrsiflorus very common in the pine woods, and forming an evergreen shrub ten to fifteen feet high; a Sambucus, Lonicera racemosa, Spiræa ariæfolia, Rhus, 3 sp., Caprifolium Douglasii, a Diplacus, Garrya elliptica, a Rosa, Lupinus arboreus and ornatus; Ribes speciosum and malvaceum; Adenostoma fasciculata, a neat little evergreen shrub allied to Spiræa; Arctostaphylos, 3 sp., a Vaccinium, Gaultheria Shallon, an evergreen Prunus resembling the Portugal Laurel. Of annuals and perennials, a Hugelia, Delphinium, 3 sp., Leptosiphon androsaceus and densiflorus; Collinsia bicolor, a Convolvulus, a Malva, Lupinus succulentus and densiflorus; a Castilleja, an Œnothera, a Chironia. Of bulbs, Calochortus luteus, Cyclobothra alba, Brodiæa congesta,

Calliprora flava, Hesperoscordum lacteum, and a Zygadenus called Amole, of which the bruised roots serve as a substitute for soap.

On June the 22d I left Monterey for the mission of Santa Cruz. Santa Cruz is across the bay, due north, of Monterey, and at a distance of sixty miles by land, whilst by water it does not exceed twenty-five miles. Passing along the sea-shore over the plains, which present the same vegetation as about Monterey, we arrived in the afternoon at the mission, after a gallop of seven hours. The mountains of Santa Cruz are well wooded with Taxodium sempervirens, called by the American settlers redwood or bastard cedar. In close forests it grows to an enormous size, averaging 200 feet in height, with a stem of six to eight feet in diameter, which is as straight as an arrow, and clear of branches up to sixty or seventy feet. One tree, that is termed by the Americans "the giant of the forest," is 270 feet high, with a stem measuring fifty-five feet in circumference at six feet from the ground. The bark of the redwood is from six to twelve inches thick, reddish and smooth; the timber is of a beautiful red colour, like pencil wood, fine, close grained, light, but brittle; it is well adapted for in and out door work, as the boards when seasoned do not warp, nor is it attacked by insects. Large quantities of timber are annually exported to the Sandwich Islands; 1,000 feet of one-inch boards, delivered on the beach at Santa Cruz, are worth 8l. Some fine trees of Abies Douglasii are found in the mountains of Santa Cruz; they do not form masses of themselves, but are thinly scattered among the redwood trees, with which they vie in size. The mountain oak (Castanea chrysophylla?) also occurs here, forming a tree fifty feet high; of a pyramidal shape, with persistent lanceolate leaves four inches long, serrulate on the margin; below they are covered with a rusty, yellowish down, which in the young leaves also covers the upper surface. The fructiferous catkins are produced on the points of last year's wood, and do not exceed two inches in length, whilst the catkins on the young wood are from four to five inches long, and sterile. The nuts, or rather acorns, are covered, in an unripe state, with down, and enclosed in an open cup, which on the outside is clothed with coarse scaly hairs. The mountain oak grows invariably in close shaded woods, and seems to be widely dispersed over the country west of the Rocky Mountains. Some Indian tribes eat the acorns either raw, or make a sort of bread of them. On the outskirts of the woods I observed Arbutus procera fifty feet high; a Lauraceous tree with linear light green leaves of nearly the same dimensions; two species of Ceanothus; a Corylus, a Spiræa, a Solanum, and Zauschneria, the latter with scarlet flowers like a Fuchsia.

On July the 2d I returned to Monterey. The few days of absence produced a great change even in the vegetation; the fields and woods, which before were covered with flowers, are now gradually drying up, from the total absence of rain during the summer months; even the bulbous plants had, during that time, shed their flowers and ripened their seeds. Crossing the wooded heights near Monterey, I arrived at Carmel Bay, after an easy walk of two hours; here I found a Diervilla, Cupressus marcrocarpa, attaining the height of sixty feet, and a stem of nine feet in circumference, with far spreading branches, flat at the top, like a full grown Cedar of Lebanon, which it closely resembles at a distance; Eschscholtzia crocea, E. californica, Platystemon californicum, a scarlet Castilleja, a Mesembryanthemum, resembling M. rubrocinctum; a Cheiranthus, Stenactis speciosa, an Echeveria, Abronia rosea, and A. mellifera. These two species, the former with pink, and the latter with orange flowers, are spreading on the sands near the sea shore, and delightfully scent the air with their perfume towards evening.

Another excursion, which I made to the Rancho de Tularcitos, led over the mission of Carmel. Following up the narrow valley of the Carmel river, I entered a beautiful wood of alders, willows, and plane-trees, some of the latter attaining the height of eighty feet, and twelve in circumference. Of herbaceous plants, I observed two species of Solidago, Mimulus cardinalis, a Labiate plant, an Asclepias, an annual, with an extremely powerful smell, which, if inhaled in excess, produces bleeding at the

nose. Of shrubs, a half-climbing Caprifolium, with small dingy flowers; a Clematis, a species of Cercocarpus, and on rocky ground, a patch of Berberis Aquifolium. The sides of the mountains, which attain no great elevation, are thinly covered with oaks. The higher parts, near the Rancho de Tularcitos, are occupied by Pinus macrocarpa, which rise to the height of eighty to a hundred feet, with a stem of six to eight feet in circumference. The larger trees had not yet ripened their cones, but the smaller ones, of twenty to thirty years' growth, ripen theirs at different periods, and furnished me with a few cones. On my return thence, over El Toro, a high mountain, destitute of trees or shrubs, but thickly covered with wild oats (Avenæ species,) I found, on the north side, in a ravine, a few small trees of Pinus Sabiniana, the highest of them not exceeding thirty feet. In this situation they appear to produce their cones when yet very young. Some trees, measuring from eight to ten feet in height, and of as many years' growth, had cones on them, which, like the foregoing species, seem to ripen about November.

On August the 23d, I embarked on board the bark Joven Guipuzcoana, whose owner, Don José Antonio Aguirre, invited me to take a trip with him up to the Bay of San Francisco. On the following day we anchored off Santa Cruz, where the ship was to remain a day or two. I took advantage of this delay, and made an excursion to the mountains, in a different direction from that visited before. Passing through a copse wood, composed chiefly of Pavia californica, Quercus californica, Ceanothus thyrsiflorus, a Corylus, Rhus viride, called Yedra, and justly dreaded by the inhabitants for its poisonous properties, I entered a beautiful pine wood. The leaves of this species of pine stand in threes; are longer than the cones, usually eleven inches in length; cones five inches long, by two and a half at the broadest part, of a reddish brown, the centre of the scales terminating in a small sharp point, bent downwards. The trees rise to the height of a hundred feet, with a stem three to four feet in diameter, producing the cones in clusters of three or four, which ripen towards September, or in about eight months from the time of flowering. This handsome species of pine, which appears to be new, I have named, in compliment to the late secretary of the society, George Bentham, Esq., Pinus Benthamiana.

Another kind of pine that I found within a few hundred yards of the foregoing species is, probably, the doubtful and little known Pinus californica; the trees seem to be of slow growth, and do not attain any great height, seldom more than twenty-five feet by eight inches in diameter. The leaves are in bundles of three, four and a half inches long; cones, five to five and a half inches long by two broad, the outer surface curved, the inner straight, scales on the outer surface more developed, enclosing two small, flat, winged seeds. The cones are only produced on the main stem; when ripe, they are of a light brown colour, and stand off at nearly a right angle; when old, of a silvery grey, pressing firmly upon the stem, and remain on the trees for a series of years without opening or shedding their seeds.

On August the 28th, the bark got under weigh for Yerba Buena. The whole of the coast is destitute of trees or shrubs, with the exception of Point Ano Nuevo, where some pines or cypresses seem to grow. On September the 2d, we were opposite the narrow but safe entrance to the bay of San Francisco; a large inland sea, divided into several branches, forming not only the principal port in California, but the largest and safest on the whole western coast of America. About noon we anchored off Yerba Buena, a small town, rising rapidly in importance.

The vegetation about Yerba Buena is poor; the sand hills that surround the town, and which extend for several miles into the interior, are but thinly covered with brushwood of oak, (Quercus californica, Ceanothus thyrsiflorus, Rhus, "Toyon," a Prunus, and a Baccharis.)

On September the 10th, I went across the bay to Sausalito. Early the following morning, we were joined at the mission of San Rafael, by General Vallejo. After enjoying the hospitable board of General Vallejo for three days, I left my companions and proceeded with F——, an Englishman, to his farm at San Miguel, distant thirty

miles, where he is established with two of his countrymen in raising grain and rearing horses and cattle. The face of the country about Sonoma and San Miguel is perfectly level towards the bay, and capable of great agricultural improvements. Several species of oak (Quercus) thrive well in the fine black vegetable mould, and are disposed into large irregular clumps, giving the country the appearance of an immense park, enlivened by numerous herds of elks and antelopes. A ridge of mountains which rises at a short distance from San Miguel is thinly scattered over with oaks, and a few Abies Douglasii interspersed. No other kinds of pine occur here. In the shaded dells I found a Viburnum, Euonymus, and a large leaved Calycanthus in seed.

From San Miguel I went to Bodega, where the Russians a few years back had an establishment granted them by the Mexican government, in order to supply their possessions in the north with wheat, &c. When their term expired, it was purchased by Captain S——, an American, who erected a steam saw-mill there, for which the redwood trees that cover the mountains supply him amply with material. This is the most northern limit of this magnificent tree, growing at intervals from the latitude of 32° N. up to the River Ross in 38° 15′. From Bodega I returned by way of San Rafael to Sausalito, passing over a beautifully undulated prairie, destitute of water or trees. On October the 7th I returned to Monterey.

With the beginning of November the periodical rains have set in; they are unaccompanied by thunder, but continue for several days without intermission, and terminate by the end of March. The heaviest fall of rain occurs in January and February. Judging from the quantity that fell up to the middle of December, it would seem that the rains will be more abundant than for some years past. El Toro, which lies due east of Monterey, has already been twice covered with snow, but it soon disappeared again. The rainy days are succeeded by frosty mornings, but the cold is seldom so intense as to freeze water. The thermometer, which ranges in Monterey during the summer months from 62° to 65° of Fahr., is now from 50° to 55° during the day.

With January the rains set in unusually severe; the Salinas and other rivers, which are fordable during ordinary seasons, have now become impassable. The first indications of the returning spring I observed in the flowering of Garrya elliptica, Berberis Aquifolium, Ribes speciosum, R. malvaceum, some Arctostaphylos, a Vaccinium, a dwarf shrubby Prunus, with white pendulous flowers, and an Ornithogalum.

When the weather permitted it, I continued my rambles on foot in the mountains of Monterey, and discovered on the western declivity, within two miles of the sea shore, a species of pine which I had not found previously. The leaves are two in sheath, three to five inches long; cones in clusters of four to seven, oval, three inches long by two broad, of a reddish brown before they are perfectly ripe, then changing into light brown; scales pyramidal, terminating in an ash-gray sharp point. The trees attain no great elevation, averaging twenty feet, rarely thirty, with a stem of twelve inches in diameter; they are confined to half a square mile, and like P. insignis, by which they are surrounded on all sides, thrive in coarsely decomposed granite. This species, which appears to be new, I have named, in compliment to Thomas Edgar, Esq., the society's treasurer, Pinus Edgariana. In the same locality with the above pine, I observed a cypress (Cypressus) with smaller cones than C. macrocarpa, of which it seems more than a variety, being a stunted shrub six or ten feet high.

Returning by a different route, through a thick brushwood of Arctostaphylos and Ceanothus, I found on the steep acclivity, in a shaded dell, a Rhododendron, without seeds or flowers, forming a shrub five feet high, well beset with flower buds, and Castanea chrysophylla* in the same condition; this evergreen chestnut forms a shrub three to eight feet high, of a pyramidal shape, with persistent lanceolate leaves, green above, and of a rich golden yellow below. From its situation, and habit in general, it may be expected, if I am fortunate enough to introduce it, to withstand the ordinary winters about the neighborhood of London, since it is known from experience, that

* What was called so formerly is a different species of Castanea.

Ceanothus thyrsiflorus, with which it grows, is of that degree of hardiness.

In February, a species of Dodecatheon appeared everywhere common, as also Fragaria vesca, a Cardamine, a Viola, a Saxifraga, and two Trilliums; of shrubs, two species of Ceanothus, the one producing numerous bundles of blue flowers from the axils of its small evergreen leaves; the other, C. thyrsiflorus, often attaining the size of a small tree, sending forth its numerous heads of azure flowers from last year's wood. In the sandy plains towards the River Salinas, the large, golden flowered Viola chrysantha, Nemophila insignis, Eschscholtzia crocea, and E. californica, were common.

My sojourn in California being restricted according to my instructions to one year, whilst a similar period is to be devoted to visiting the northern provinces of Mexico, or in case I find this country a favorable field for my exertions, permission having been granted, until I received orders to the contrary, that I may stay the whole term of two years in California: I resolved, in the absence of new instructions from the Council of the Society, not to proceed to northern Mexico, where, during the war with the United States, my peaceful occupation might be disturbed, and my personal safety endangered, but to remain another season in California; more especially as, from my late arrival in this country, and subsequent circumstances, I could not extend my excursions as I intended to have done. The next step to be considered is, whither can I proceed to follow my occupation with satisfaction to my employers and myself? The country has been taken possession of last year by an American force, much against the good will of the Californians. Now, although the country is apparently quiet, it is difficult to foretell how long it may last, and if these disturbances should break out again during my busy season, it might season, it might seriously affect my plans. I therefore came to the conclusion of visiting the Sacramento Valley, where the settlers are all foreigners, and where I need not be under any apprehensions of disturbances in the lower country.

Accordingly I embarked on the 8th of March on board the American bark Tasso, and arrived at Yerba Buena after a passage of five days. A few days' detention enabled me to examine the neighborhood, and added to my collection, among other less interesting plants, a white Myosotis, a Liliaceous plant, an Œnothera, a scarlet Aquilegia, an Iris, and Ribes echinatum, the latter common on the sandhills that surround the town.

On March the 23d I embarked in a small launch with Mr. Cordua, who was proceeding to his farm in the Sacramento Valley, and who kindly invited me to make his house my head-quarters; an invitation which I gladly accepted, as from his long residence in the country, and the situation of his farm, in the centre of the valley, I anticipated many happy results. Late in the afternoon of the following day we arrived at the Corte de Madera, which, as the name implies, is a woodcutting establishment, where Mr. Cordua had some business to transact. Half an hour's ramble in a fine grove of redwood trees furnished me with a brown, small flowering Martagon, a Boragineous plant, and an Equisetum. The same night we left again, and passing the following morning through the straits of Carquinez into Suisun bay, we entered the River Sacramento in the afternoon. The aspect of the country is flat, presenting a boundless field of rushes as far as the eye can reach, bordered on both sides by a distant ridge of mountains, which, from the severity of last winter, presented a line of snow. The lowlands of the Sacramento are subject to inundations during the spring months, and are destitute of trees, with the exception of the banks, which, from the accumulation of soil during the inundations, are higher than the rushlands; a belt of trees and shrubs, varying from thirty to two hundred yards in depth, extends along the banks, and is chiefly composed of Oaks, Platanus, Willows, Poplars, Ash, Negundo californicum, Pavia californica, Cornus, a dwarf Birch, and a Grapevine. After a tedious process of warping up the launch against a strong current, we arrived at the landing place of Fort Sacramento, on the 31st of March.

The vegetation in the Upper Sacramento valley is much earlier than about the bay of San Francisco; there the trees were still

apparently dead, whilst here the Oaks were sending forth their young leaves, and the prairies were teeming with flowers, among which I recognised many old acquaintances. It was delightful to behold the variety of colours over the extensive prairie, produced by patches of a Leptosiphon, Gilia tricolor, G. capitata, Oxyura chrysanthemoides, Platystemon californicum, Nemophila insignis, and another species, two Compositæ, a Viola, Eschscholtzia crocea, E. californica, a Delphinium, and, in places where water collects during the rainy season, a Martagon, with dingy yellow flowers spotted with brown, Mimulus tricolor, two inches high, and Limnanthes pulchella, having an abundance of delicate pink flowers.

On April the 13th I left with Mr. L. for his farm, seventy miles higher up in the valley. Mr. L. had been in the lower country, and came up thus far with his goods in a large canoe, and was now proceeding with them in waggons. Crossing Feather river, which here is eighty yards broad, and of considerable depth, our course lay five and twenty miles along that river, through a beautiful wood of evergreen and deciduous Oaks: here I found, in sandy tracts, a Leptosiphon, with white fragrant flowers; and Collinsia, and C. bicolor, the latter invariably growing at the foot of large oaks. Leaving Feather river, we struck across a prairie for twenty miles: here immense fields of Eschscholtzia crocea, E. californica, and a Ranunculus, presented themselves, each species growing by itself, which with the plants observed on Mr. Cordua's farm, and Lupinus nanus, two Delphiniums, a Trifolium, several Compositæ, an Œnothera, and a Malvaceous plant, produced a splendid effect. A small patch of the beautiful little Leptosiphon aureus, with golden flowers, I also found in the open prairie; it is, however, by no means common. The prairies in the Sacramento Valley are divided by small rivers, termed "creeks" by the American setters: these creeks generally have a border of oaks upon their banks, which also extend over the rich bottom lands. In the dry beds of these rivers I observed plants which nowhere are to be found on the prairie, the seeds of which have evidently been carried down from the mountains during the rains, as for example, Pentstemon azureum; an Umbelliferous plant, with an aromatic tap-root, held in repute among the Indians for its medicinal properties; in rather damp places, Clintonia elegans, C. pulchella, and Limnanthes alba. A four days' slow drive with the waggons brought us to the farm of my companion: the vegetation here differed in no respect from that already observed in the valley.

An opportunity of visiting the mountains was afforded me a few days after my arrival, which I embraced with pleasure, as from the hostile character of the mountain Indians towards the settlers, it was not deemed prudent for me to make an excursion in that direction, attended by a guide only; I therefore joined a party of settlers who were going to the mountains to examine the timber, and if possible to find a site for a saw-mill. On the first evening we encamped under a large oak, near Pine creek, a little mountain rivulet; here I found Asagræa, a Lychnis, an Umbellifer, Triteleia, with a head of pink flowers supported on a *twining* stem, five feet long; in the creek, a Saxifraga; of shrubs and trees, a Ceanothus, evergreen and deciduous oaks, and Pinus Sabiniana. This species of pine, of which I saw some small trees near Monterey last year, rises here to the height of fifty or sixty feet, with a stem of six feet in circumference, and possesses none of the regularity so characteristic of the pine tribe. The branches, which in other pines stand in whorls, are in this species quite irregular (except when young,) which, combined with the paucity of its partly bent down, glaucous leaves, gives the tree a peculiar appearance. Early the following morning we ascended the gradual acclivity, and passed through a brushwood entirely composed of a species of Ceanothus. At noon we arrived at the edge of a noble pine forest; a few moments' rest, during which one of our companions shot a deer, enabled me to collect a Viola, an Erythronium, a Prunus, a Lilium, and a Cyclobothra. The species of pine composing the forest is principally Pinus Benthamiana, with a few trees of P. Lambertiana, Abies nobilis, and a species of Thuja intermixed, a Ceanothus, spreading on the ground, and Cornus florida, which were

the only plants observed in the pinewoods. On our return through a steep ravine, I found a shrubby Cercis, with pink flowers, a Prunus, and again Cyclobothra.

By the end of April the prairies in the Sacramento Valley assumed a different aspect; two weeks ago they were a carpet of flowers, which have now disappeared, and a yellow, sickly tinge pervades the whole: such is the rapidity of vegetation under the cloudless sky of a tropical sun. Bulbous plants now make their appearance; the most common being Triteleia laxa, which not only grows in the open prairie, but also in the shaded and damp lowlands; a pure white variety of it I also found; it is, however, by no means common. One of the species of Calochortus is also very frequent; a whitish variety occurs occasionally along with Brodiæa congesta, and another Liliaceous plant.

Being now aware of the rapidity of Californian vegetation, I lost no time in collecting such seeds as were worth taking, and returned to my head-quarters by the beginning of May. Most kinds had, during the fortnight since I first saw them in flower, ripened their seeds, and it was with difficulty I found a few grains of the beautiful little Leptosiphon aureus, and similar plants, which, between their taller neighbors, had almost become invisible.

An excursion to "the Butes," an isolated group of mountains between the Sacramento and Feather rivers, furnished me with species of Campanulaceæ, Labiatæ, Scrophularineæ, and Compositæ; a Gilia, a Linum, a Trifolium, two species of Asclepias, Clarkia elegans, Lupinus densiflorus, and an Umbellifer, called Yerba de la vivora, the leaves and stem of which are universally used with success against the bite of rattlesnakes. From the rocky summit of the Butes a beautiful view is obtained of the Sacramento Valley; during the time of my visit, the lower country, owing to the melting of the snow in the mountains, and consequent inundations, presented an immense lake

Another excursion I made to the mountains led along the right bank of the Chuba river, over the now parched up prairie. A ride of fifteen miles brought me to the foot of the mountains. The lower range, as in the former visit higher up in the valley, is occupied by a Ceanothus, a few live oaks, and Pinus Sabiniana. Following a small rivulet, I found there a Mentha, and another Labiate plant, Stenactis, a shrubby Labiate with large white flowers, and Collinsia tinctoria. This new species of Collinsia is of stronger growth, though less striking, than C. bicolor; it grows chiefly in the dry sandy bed or on the banks of the rivulet, and produces its yellowish flowers mottled with purple much later than C. bicolor. On a subsequent occasion, when I returned to this place to procure seeds of it, my hands were stained yellow by the glandulous hairs which cover the seedpods, from which circumstance I named it Collinsia tinctoria. Another interesting plant I found on this excursion is Nemophila speciosa, with white petals, one-third of which is tipped with purple. It grows generally near rivulets, or in damp and partly shaded places. If the few seeds I procured should vegetate, it will prove a great acquisition to that handsome genus. The higher part of this range of mountains is less accessible than on the former visit. My endeavors to proceed farther were eventually frustrated by the steep banks and swollen state of the Chuba.

By the beginning of June I set out again, in company with Mr. Cordua and an Indian, to visit if possible the snowy heights of the mountains, generally termed by emigrants from the United States the Californian Mountains. After Crossing the Chuba river, we struck across the prairie, and entered the mountains near Bear Creek, where we encamped towards evening in a grove of Pinus Sabiniana and oaks. The vegetation here differed in nothing from that observed on the right bank of the Chuba on a former visit. Calochortus, which had been very common throughout the Sacramento Valley, was still in flower here, the white variety being more frequent than the yellow. Early the following morning we were *en route* again, passing through an interminable wood of Pinus Sabiniana and oaks. Here I observed a pretty little Allium, with purple flowers, an Asarum, a Viola, a Polemonium (?,) Hosackia bicolor, and Mimulus bicolor, the two last luxuriating in the sandy bed of dried up rivulets. As-

cending the gradual acclivity, we left the region of Pinus Sabiniana, and entered that of Pinus Benthamiana, which seems to be the characteristic of the upper region. Some trees of this noble pine attain an enormous size. The largest I measured were 28 feet in circumference, and 220 feet high. Of equal dimensions is P. Lambertiana, which, however, does not constitute masses by itself, but is thinly scattered among the former. The same is the case with a Thuja, which rises to the height of 130 feet, by 12 to 15 in circumference. Few plants occur in these pine tracts; the principal being some Cyclobothras, a Calliprora, an Iris, Papaveracea; and, in shaded places, a Rubus, a Philadelphus, a Spiræa, Pyrus florida, a Rosaceous plant, and a Taxus—the latter, judging from the few specimens I saw, attaining only the size of a shrub or small tree.

On the fourth day we reached Bear Valley, a beautiful little mountain valley surrounded by a lofty ridge of mountains, which is well wooded with Pinus Benthamiana. The north side of the valley was still covered with snow. On the south side, however, a few spring flowers had made their appearance, among which I observed Pæonia californica, with brown petals edged with orange; some Compositæ, a Ranunculus, a Corydalis, and a Nicotiana. A new species of pine occurred in the valley, of which I only saw two trees of dwarf growth, probably stragglers from a more northern latitude. The leaves stand in pairs, and are three inches long; cones two inches long, by one broad. In general appearance the tree is not unlike a young Scotch fir. The cones at the time of my visit were open, and the seeds had fallen out. The upper end of the valley is bounded by a mass of granite, terminating in a precipice 800 feet in depth, below which the Chuba river is winding its way, appearing like a sheet of foam. In warm and sheltered situations, where the snow had melted, I observed an Allium, a Pentstemon, a Statice, a Phlox, and a Calochortus—the latter not yet in flower. The more elevated parts above Bear Valley, from the severity of last winter, were still several feet deep, covered with snow, for which reason we returned hence by the same road we came. Immediately upon my arrival at head quarters, I proceeded once more to the Upper Sacramento Valley to collect such seeds as I could not procure before.

Having packed up my collections, and sent part by water to San Francisco, I left on the 30th of June for Monterey, in company with an American whom I had engaged as guide. Towards evening of the same day we arrived at the junction of the Feather river with the Sacramento; and passing, the following morning, our luggage over in a canoe, we swam the horses across; the distance from shore to shore being not less than 300 yards. We now continued our course over the prairie on the right bank of the Sacramento river for two days, and crossed again to the south side in a ferry boat, at the Straits of Carquinez. A kind of tertian fever, accompanied by violent headache, under which I had been suffering some days previous to my departure, here developed itself into a quotidian fever and ague, which for want of proper medicines, the constant exposure to a tropical sun during the day, and camping out at night, soon reduced me to such a state of debility as scarcely to be able to sit on horseback.

From the Straits of Carquinez we passed along the Bay of San Francisco to the Pueblo of San José, and reached Monterey on the 8th of July. Soon after my arrival (having, with the assistance of my little medicine chest, cured myself,) I continued my excursions about Monterey as far as returning streng h permitted, and collected such kinds of seeds as I thought worth preserving. Towards the end of July I went over to Santa Cruz for a similar purpose, and whilst visiting a family upon their farm, with whom I had become intimately acquainted during their winter residence in Monterey, I was again taken ill with fever and ague. In addition to the seeds which I collected in the Santa Cruz mountains last year, I found the evergreen Chestnut with ripe fruit. This shrub, of which I had been most anxious to procure seeds, attains the height of ten feet, and is of a pyramidal form. The nuts, which are produced in prickly clusters on the points of the young wood, are each enclosed in separate cells, and are of the same size and

shape as the beech-nut. The kernel is pleasant to eat, resembling the filbert in flavor.

On August the 13th I returned to Monterey, and was once more laid up with fever and ague, from which I did not recover until the beginning of September. On September the 6th I went again over to Santa Cruz in quest of pine cones, which were now ripening. The sorts I procured were Abies Douglasii, Pinus Californica, and P. Benthamiana. The cones of the latter were unusually scarce this season, and seem to have suffered from late spring frosts. A few cones were all I could procure of this sort. They were smaller than those of the preceding year, and contained but few good seeds.

On September the 20th I again left Monterey for the southern parts, which, on account of the disturbed state of last year, I could not visit before. As guide I engaged the services of a man who had accompanied me on my last excursion to Santa Cruz, and who, from his profession as a hunter, was well acquainted with the intricate mountain paths of the district I intended to visit. On the day of our starting we reached the mission of La Solidad, an ill-constructed, half-ruined building, situate in the Salinas valley, and encamped towards evening on the banks of the Salinas river, within a short distance of the mission. By sunrise the following morning we were again on horseback, and leaving the main road on the right, we entered a mountain defile leading to the mission of San Antonio. Here I observed a shrubby Arctostaphylos, with large brown seeds; a half-climbing Caprifolium, profusely covered with scarlet berries; an evergreen shrubby oak; and a subdeciduous oak, the latter forming a tree thirty feet high.

From San Antonio a range of mountains extends along the coast, attaining a great elevation, which, although apparently barren, as seen from the mission, I was assured, on the western flank towards the sea is covered by large pines. The lower region of this range, at the foot of which the mission is built, is thinly covered with the evergreen Californian Oak, a Ceanothus, Cercocarpus, a small leaved shrubby Fraxinus, and Pinus Sabiniana—the latter at the time with ripe cones. An evergreen shrubby Prunus, called Islay, with a holly-like leaf, bearing a red fruit resembling the cherry-plum, grows also abundantly here. The thin pulp which surrounds the proportionate large seed is sweet and pleasant to eat. The kernel, after being roasted and made into gruel, is a favorite dish amongst the Indians. Having ascended the first ridge, we passed through thickets of Arctostaphylos tomentosa and Ceanothus thyrsiflorus, and entered a forest of Pinus Lambertiana. The cones of this noble pine are always hanging from the points of the branches, were by this time already open, and the seeds had fallen out. From cones that had been blown down, I picked out a few seeds.

Descending the western flank of the great mountain range, I found at last the long wished for Abies bracteata, occupying exclusively ravines. This remarkable Fir attains the height of fifty feet, with a stem from twelve to fifteen feet in diameter, one-third of which is clear of branches, and the remainder forming an elongated tapering pyramid, of which the upper part, for three feet, is productive of cones. Having cut down some trees, I found to my regret that the cones were but half grown, and had been frost-bitten. In more sheltered situations, towards the sea shore, the same happened to be the case; and I was thus precluded all hope of introducing this remarkable Fir into Europe.

Finding it impossible to prosecute my journey to the south along the coast, from the numerous ravines which descend from the mountain range, I returned hence to San Antonio, and crossed by the farm of El Piojo, where the ridge is less elevated. A small pine wood, which became visible on our descent, extending along the beach, looked like an oasis in the desert—the dark green of the pines forming a beautiful contrast with the parched-up fields. Upon a nearer examination, I found the wood to be composed of a variety of Pinus insignis, with larger cones than those about Monterey, from which it also differs in their being produced in less abundance. Following along the sea shore for nine miles, we struck inland again, and arrived at the mission of San Luis Obispo, from whence

we proceeded over a flat and uninteresting country to the mission of Santa Ines. The whole of this route is but poorly wooded by a few stunted oaks. On the ascent to the mission of La Purissima, the monotony of the bare hills was somewhat relieved by a small forest of Pinus Edgariana, which attains no larger size than those observed near Monterey.

Previous to leaving Monterey I was told by several persons that a kind of thin-shelled pine-nut is occasionally brought for sale by the Indians to Santa Ines and Santa Barbara, without being able to learn any more respecting it. Upon making further inquiries at Santa Ines, I was told that the Indians bring them from a great distance, that the harvest of them was over, but that I might procure a few of the mission Indians. Proceeding to a hut which was pointed out to me, I bought a gallon of the fresh seeds; and inquiring about the size of the cones, the Indian handed me two, with the information that the trees are of a small size; when, judge my surprise, I recognized in them those of Pinus Llaveana, which I had on former occasions found in several parts of Mexico.

Seeing there was no prospect of enriching my collection of seeds by proceeding further to the south, I returned from Santa Ines to San Luis Obispo, near which mission the late Dr. Coulter gives the station of Pinus muricata, and which seemed to have escaped my notice when first passing through that place. Upon a nearer examination I found that on the "Crusta," or ascent from San Luis Obispo, only one kind of pine is growing on the brow of the mountains, which proved to be P. macrocarpa. From San Luis we returned to San Antonio, over a flat and uninteresting road, and thence to Monterey, where we arrived on the 18th of October.

On October the 25th I again left Monterey, with my former guide, to visit the continuation of the San Antonio range of mountains, which, from the nature of the ground on that side, I attempted now by a different route. Following along the seacoast over a succession of hills intersected by numerous deep ravines, we found our further progress impeded on the third day by the extreme steepness of the range. The only objects derived from this excursion were some very fine cones of Pinus macrocarpa, some measuring fifteen inches in length; they were growing on trees thirty to forty feet high, in rather exposed situations, at an elevation of about 4,000 feet above the level of the sea.

By the beginning of November we returned to Monterey. The rainy season being now close at hand, and having no more excursions to make, I prepared to return to Europe with my collection. Owing to the little traffic carried on between California and the western ports of Mexico or central America, I did not procure a passage before the 5th of February. I arrived at Southampton, after a very fine passage, on the 3d of June.

GROWING FOREIGN GRAPES IN HOT-HOUSE FRAMES.

BY ROBERT MESTON, NASHVILLE, TENN.

A. J. Downing, Esq.—*Sir:* I see in the December number of the Horticulturist a doubt, whether Black Hamburgh grapes can be grown in common hot-bed frames. I will give you my experience upon this subject, and if of any value to your readers they are welcome to it.

In the first place, the Black Hamburgh grapes do well in common frames in England; and my opinion is that they will do better in this country, as of the two, this is the best climate for early forcing, as we have less fog and more sun.

It must be understood that vines forced

after this method require a border equally as good, and as much nourishment, as vines planted in a vinery.

The vines are planted against a wall, or close fence, about three or four feet apart, according to the width of the lights or sashes to be used, planting one vine to each light or sash. If a second frame is required, leave a wider space between the two frames. The vines I should plant, would be one year old from the bud; and if in a good border, when three years old would be in good fruiting condition. Cut them down to one eye until the season before they are intended to fruit, then encourage two canes; the strongest is allowed to run its whole length, only stopping the laterals. The remaining cane is stopped at five or six feet, to throw as much strength as possible into the fruiting cane.

The frame should be three feet high in the back, with a hole cut in the back under the centre of each light, to be shut up with a sliding door,—observing to do the same with the front. Nail brackets on the bearers of the lights about one foot apart, and about the same distance from the glass as the upper end of the frame, diminishing gradually from back to front to eight inches. Upon these brackets is nailed the strips that form the trellis. [In other words, make a trellis so that it is eight inches from the glass at the front of the frame, and a foot at the back.]

Frames of any size will do; but if I were going to make new ones, I should prefer a frame the width of four lights,—the lights or sashes from eight to ten feet long.

Making up the hot-bed is the next consideration. For this purpose, get long manure enough to make a bed about eighteen inches high, well fermented, and packed together; and form the hot-bed about eight inches larger than the frame all around. When settled, put about four inches of very coarse sand, or creek gravel, or some other material that will allow the heat and moisture to escape into the frame, and still hold the heat. When the frame is put on, pass the fruiting cane in the back and train it down the trellis in *serpentine* form,—never allowing the turns to approach nearer than a foot. The cane which is left out must be cut down to one eye, to make fruiting wood for next year. The cane that fruits this year is cut down next, and so on. The bed should be made about three feet from the wall. The vines will soon begin to break, with proper management; then the treatment is the same as with grapes in a vinery.

I would not advise any one to begin this method of forcing grapes too early in the season in the northern and eastern states; but rather to wait until the winter is thoroughly broken up. Put the frame on the border, and put the vines in two or three weeks before forcing them. By closing the frames early, and syringing the vines and sand, you will give a great assistance to the swelling of the fruit. If the vines are not to be forced the hot-bed can be dispensed with; only the frame and lights and well prepared border being necessary. I have no doubt but any variety may be grown this way. The Black Hamburgh does well in cold frames in England, and in this sunny climate. I should not be afraid to risk any of the other varieties.

Respectfully, ROBERT MESTON.

Nashville Horticultural Gardens, Tenn., Dec. 2, 1849.

NOTES ON FRUIT CULTURE IN ILLINOIS.

BY PROFESSOR TURNER, ILLINOIS COLLEGE.

A. J. Downing, Esq.—*Dear Sir:* Since my last, some facts have come under my notice which I think may be of general interest.

And first, in my last communication I stated that the gentleman in St. Louis did not summer-prune his grapes, as I then supposed, on good authority; but I have since learned, from a more reliable source, that he does practice rigorous summer-pruning, as well as training on very high trellises. My own grapes last fall all blasted, except a few on one Catawba and one Catarobe vine, which bore a full crop, on that part of the trellises which was more than ten feet above the ground, though they nearly all blighted below that point. This Catarobe vine stands, also, in what cultivators would generally consider the worst possible location. It was planted mainly for shade, ten feet east of a shed and cherry tree, which shuts off all sun from the west, and four feet north of a wood-house, which wholly excludes the southern sun from the roots; a large peach tree stands about six feet to the south end of it, shading it also in that direction; so that the sun can rarely strike the ground where it grows. Hard beaten paths—one to my stable and another branching to my carriage-house—pass directly under it; and indeed the whole surface is so firmly trodden for some feet all around it, that nothing will grow but chick-weed; and the ground has never been stirred by any implement since the vine was set—several years since. And as I never expected any fruit from the vine, I let it run at random up the trunk of a dead locust tree, and have never once touched it with a knife summer nor winter. Add to this a leading-trough, which conducts water from a well twenty-four feet deep to the stable-yard, makes a right angle directly under this vine; and the water from the well, every time it is poured in it, (which is always at least two or three times each day,) runs over the angle in the trough, and keeps the hard surface of the ground drenched wet with cold water and ice from one year's end to the other. Yet this ugly, capricious vine, as if in mockery at once of all my theories, my expectations, and my toils, last year bore a full crop of good ripe grapes; while all my other vines which I have pruned, and tilled, and trimmed, and manured, and salted, and bone-dusted, and limed, and sulphured, and root-pruned, and trenched, and trained up, and trained down, and trained sideways, all—all failed. Now if any of your correspondents can tell why it ripened its fruit, unless it was from sheer spite,—real "malice prepense," as the gentry of the satchel would say,—they can do more than I can. However, it should be said that the Catarobe has ripened ever with me better than any other grape I ever had; and a gentleman, who is a professed amateur of the vine, and has travelled extensively both in this country and in Europe to study its habits and wants, informs me that in this western country he has noticed that this is a general fact. But why should this vine bear so much better, or, at least, ripen its fruit so much better than any other Catarobe vines? There is the mystery.* A

* We do not know this Catarobe grape; but if, as we suppose, it is a native of Illinois, the matter is explained at once, by its being at home in that *climate*. The Catawba, with us, bears admirable crops, close pruned; and we suspect the difficulty with this, and other southern grapes in Illinois, is that the climate in summer is not congenial to them. Ed.

legitimate inference from this single fact would run somewhat as follows: "Set your vine in the worst place on your premises you can find—even where you suppose it can never bear a berry; neglect it all you possibly can, except to pour cold water upon its roots three times each day the year round, and if all your other grapes blight it will not." Now this case thus shows the danger of inferences from single facts, which is one end I had in view in citing it. With this single exception, all remedies for grapes this year have totally failed, so far as my knowledge extends, wherever the vine stood on a close bottomed soil, or subsoil of clay or marl.

Pear Blight.—Mr. CHAMBERLAIN, the oldest and most experienced nurseryman in this vicinity, invited me last September to call and examine his pear trees,—saying that he could there show me full proof of my theory of blight, so far as this region at least was concerned, if I would do so. A few days after I rode out, and was myself quite surprised to see several of his finest pear trees, from roots some ten years old, sun-scalded on the southwest side. The corticle appeared at first view as fresh and healthy as ever. The trees had made a fine vigorous growth through the summer; and at four feet distance from the trunk not the slightest indication of any approximation to disease could at first be discovered. But on cutting through the corticle with a knife, the trunks were in many cases blotched with streaks of dead, putrid bark, although the last summer's growth of wood directly under these blotches was as sound, and clean, and as vigorous as on any other part of the tree. These blotches invariably commenced on the southwest side of the trunk or large limbs, at precisely that point where the rays of the sun struck it with greatest power, and generally where there was a slight crook or inclination toward the sun. The poison from the blotch seemed to diffuse itself upwards and downwards chiefly, but in some cases also laterally, almost or quite round the tree. In a few days the leaves about the blotch began to turn black at the top; and the whole limb, or the whole tree, (as the case might be,) connected with the blotch died. Mr. CHAMBERLAIN was at work, himself, in his fruit-yard every day, and says that he knows that the trees were perfectly healthy up to a peculiarly hot week in August, when he accidentally discovered the mischief in its incipient stages, in attempting to side-graft a tree, and on close inspection found it on several others; none of which, however, were from seedling roots. And on this point he cannot have been mistaken, as the reason's growth directly under the blotches clearly proves. Now this certainly was *not frozen-sap blight*. Still, it *is* the blight that most troubles us here, however it may be elsewhere, and which he, as well as myself, once thought to be frozen-sap blight; but now we KNOW that it is not.

I have noticed no new developments of the disease on the leaf of my own pear trees which I described in my last, and of course do not now expect to until spring.

Cherry Trees.—I have read, with much care and interest, the remarks of your esteemed correspondents on the bursting of the bark on cherry trees; and I cannot say that their observations and philosophy are not correct for their latitude and longitude. But it certainly will not do here; and nothing that has been tried, but peeling the corticle, will do. It certainly is not true, *here*, that the corticle continues an organic part of the tree, and expands with its expansion until it easily bursts; and a single fact proves it. I have just been over to measure a couple of cherry trees, of the

Red Heart variety, which I peeled for a neighbor two years ago, up as high as I could reach from the ground; and above that, left three unpeeled, thinking the shade of the leaves would protect them. And so indeed it has. But the circumference of the whole trunk, for some seven or eight feet above the ground, on the part peeled, has increased in two years some four inches, while the unpeeled part above has scarcely increased an inch,—making a bulge now on the part peeled of some three inches greater circumference than the unpeeled part, some six inches above. Now this is the way all our cherry trees of the better class will grow in fact here, however they ought to grow in theory; and I have never yet seen the first tree burst its bark after it was relieved by removing the corticle entirely; nor have I known any other injury from it, though nearly or quite every unpeeled tree in the county has burst its bark before it was ten years old. These are the facts in the case so far, though I admit the trial has not stood through a sufficient number of years to warrant us in saying that trees so peeled *never will burst*. For some entirely new phase of the matter may come up yet. We can only speak of what we do know and not of what we do not know. And very likely a similar disease may proceed from entirely other causes in other places, and require quite other remedies. I say this is possible.

The remarks of my respected correspondent, Mr. Elliot, I doubt not are true, and fully applicable where he lives, as he has a far greater practical knowledge of cherry trees than I can pretend to. He had the kindness to send me last spring half a dozen of his choicest cherry trees, done up in most perfect style, with which I intended to have prosecuted a series of experiments. But unfortunately, from the bursting of the canal and impassable roads, they did not arrive until they had all leaved out in the bundle; and with all my care I could save but one of them. I noticed that these trees were of a much shorter, hardier, and more desirable growth than we can possibly get here. For example, I took a little shoot from a Heart cherry tree two years ago, and searched around my premises for the poorest, hardest place I could find to set it. I finally concluded to set it directly under the shade of the Catarobe vine, and the adjacent buildings which I have already described. I dug out a small hole with the pick-axe and spade, and put it in—determined to have at least one cherry tree of slow, healthy growth, if possible. I have just been out and measured the amount of limb that tree so situated has made. I find it to be over ninety feet in all the limbs, with a present circumference of five inches at the ground. It is still, however, hardy and doing well, and does not need barking, and probably if not trimmed too high never will; as indeed, perhaps, none of them in that case would. But I have not another place on my premises where I could get as slow a growth again; so that a *sufficiently slow growth* in some varieties with us seems to be impracticable. I am however informed by a gentleman, from an older county south of this, that their cherry trees at first all died down as ours do, and the farmers gave them up for lost. A crop of shoots, however, came up all around from the roots. In some cases they let these grow up into thickets as thick as they could stand, by sheer neglect, because they considered them worthless, and did not care to take the trouble to exterminate them. Now mark; he says some of these thickets have grown into large trees, bear fine fruit, and *stand the climate perfectly well*. Taking my hint from this fact, I have begun to set

cherry trees in thickets from two to four feet apart, with what success time alone can show.

Again, sometime since, Professor ADAMS called my attention to a row of poplar trees, standing on the west side of the public square in this town. These trees were set out as shade trees some six or eight years since; and at the time, were enclosed for some ten feet above the ground with peeled hickory bark to keep horses from gnawing them. The bark encasement was taken from a tree considerably larger than the poplars at that time; but the latter have since outgrown this surrounding bark and burst it open. Now on all the parts enclosed and shaded by the hickory case or sheath, these poplars have passed from a smooth to a rough barked tree, while immediately above the case they have not burst their corticle, but are still smooth barked poplars. Moreover, their circumference just below the top of the sheath, is actually from four to six inches greater than a few inches above,—causing a bulge in the trunk at that point, as in the case of the peeled cherry trees. Here is then another fact, which should be noted, and from which the inevitable inference is plain: even poplars do not love to be corsetted and scalded in our hot suns; and NATURE here always shades the trunk entirely, when allowed to have her own way.

One fact more, (which must stand as a sample of a multitude of the same class,) and I have done, for this time. A friend of mine on a certain day (spring before last,) went to one nursery and purchased *sixty root-grafted* apple trees, and then procured *one hundred more, grafted on whole seedling roots*, from another nursery. The next morning he went to a third nursery and purchased *sixty more trees, budded near the ground.* All the trees were taken fresh from the ground, in perfectly good order. He prepared the same patch of ground, and set them all out promiscuously, according to their kinds of fruit, the next day. They were all treated exactly alike; and trees of the same kind of fruit from each of the different nurseries were placed in the same rows and marked. Now of the sixty root-grafted trees, only six are alive; of the sixty budded trees, only some five or six are dead; while of the one hundred, grafted on seedling roots, *not one has died.* Such facts might be cited almost indefinitely from the counties around here; and I am credibly informed, that in some parts of Indiana, trees made by root-grafting are dying off by scores, while their older seedling orchards stand in the same neighborhoods perfectly well.

But I presume, from the general tone of your correspondents, similar facts are unknown in their vicinities; and it may seem quite strange to them that they should occur here. But all I can say about it is, they will do so hereabouts, in spite of all theories and all assertions to the contrary. People may talk as they will with us out here; this is a free country, and the trees will have their own way after all. I know not whether any mere theory which I may have broached is the true theory or not, touching the solution of the above and similar facts. I will not pretend to dispute either for or against any theory with gentlemen who have grown grey in the practical service and science of horticulture. I profess to be a mere tyro in the art, though greatly interested in it, and desirous of noting, and, as far as I can, aiding, in the true solution of such facts as come under my notice in the locality where I am placed. And, as you very justly intimated in a former number, no theory, whether false or true, is good for anything further

than it serves to stimulate to the accurate notice and correct appreciation of facts. But I am always too long. And tendering you, as ever, my most hearty good wishes, I remain, respectfully yours,

J. B. TURNER.

Illinois College Dec. 25, 1849.

P. S. I must, after all, add that the gentleman above named, T. CHAMBERLAIN, Esq., invited me last August to examine an apple tree, which he had at that time full of the most beautiful ripe fruit. He calls it the Orange apple, from its yellowish colour and round shape. It is ripe about the first of August; and he says it has elsewhere been called the "Horse," or "House," or "Hoose apple." But I think it is not the common Horse apple of the south, from descriptions I have seen of the latter. This Orange apple answers well in general to the common descriptions of the Fall Pippin, except it is rather larger, and more yellowish, and is ripe much earlier. It is quite as much better than our best early apples, as the Newtown Pippin is better than the third class of winter apples. Can any of your readers tell us its proper name? It seems to be known only in a few locations in the south and west; but all who have ever seen it, I find, speak of it with the greatest enthusiasm, and justly, too. The tree is a good bearer, and a fine regular grower; and at the time I saw it, about the tenth of August, its load of large, fair, yellow fruit reminded me of nothing so much as of the fabled apples of Hesperides. I had at the time plenty of apples in my house; but threw them all aside and bought of him as long as his lasted; his were so much better.

A FEW WORDS ABOUT SICKLY PEAR TREES.

BY AN OLD DIGGER.

I FIND, on looking about my garden, talking with fruit-growers and looking through the pages of your paper, that it is an undeniable fact that a good deal more difficulty is experienced in cultivating the pear than any other of the popular fruit trees.

The time was, indeed, when pear trees—great, strong, lofty trees, too, though the fruit was rather *chokey*—grew around every farm-house, bore cart-loads of fruit annually, and were looked upon as able to "stand more hard knocks" than even an apple tree. Longer lived the pear tree certainly is by nature; and as standing venerable proofs of this, I refer you to the Endicott pear tree, near Salem, and the Stuyvesant pear tree, in New-York. As both of these trees are above two centuries old—by veritable records—it is not worth while to spend time in proving that the pear is, naturally, a long lived tree.

But, in fact, natural pear trees, that is to say, the chance seedlings of the common pear, that spring up by the sides of lanes and fences, are as hardy and as great bearers now as they ever were. What then is the matter with all the sorts whose tenderness our fruit-growers groan over?

Is it not owing to the delicate constitutions which these foreign varieties, bred in a more regular climate, have, and which makes them peculiarly alive to our great excesses of heat and cold?

Is it not true, in rich and deep soils, where delicate trees are forced into a sappy condition, when the limbs are too full of

juices, upon which the frost or sun acts readily, that blight and other diseases of the pear are most frequent?

Is it not true that foreign varieties of pear, especially those originated within the last few years, are far more delicate and liable to disease than native sorts of equal merit, raised from seed in this country?

I throw out these queries to set some of your ingenious and practical correspondents, in various parts of the country, at work to furnish materials for answers that will settle some knotty points. For my own part, I have made up my mind that to grow fine pears for profit, we must, in order to save the trees and keep them sound, keep the trunks and leading branches covered with a light *sheathing of straw* all the year round. This guards the bark of the principal parts of the tree from all excesses of heat and cold. I have experimented for four years past with this plan of sheathing, and can say that I am quite satisfied with it. Among three dozen pear trees now just come into bearing, one-third of them have been kept in straw, and not a single one of that dozen has suffered by blight or other disease; while of the remaining two dozen, nearly one-half have dropped off, and been dug up and consigned to the brush heap. Some careless farmer or gardener—fond of *shirking* everything that he can—will say, "but who can take the trouble to straw all his pear trees?"

You can, is my reply. Try it on half a dozen trees, and keep an account of the time and labor spent in it. It will amount to a few cents per tree,—not the price of half a peck of Virgalieus in the York market. And if you can gather pears by the cartload—for no fruit ripens better, or has a higher flavor than the pear in this climate—if, I say, you can gather pears every year by the cartload, for only the trouble of strawing the trees, then the blight take you if you are too lazy to do it!

AN OLD DIGGER.

DESIGN FOR A SOUTHERN COUNTRY HOUSE.

WE give the sketch of the elevation and plan of a country house, of moderate size, suitable for the southern states, at the suggestion of a number of southern readers, who do not find our northern dwellings adapted to their wants.

In the south, airy apartments, spacious, rather than numerous, shadowy roofs, and long verandas are indispensable. A detached kitchen, situated 20, 30 or more yards from the house is another universal feature. This kitchen contains servants' bed-rooms above,—only such servants sleeping in the dwelling as are personal attendants. For this reason, there is not so much room required for servants in a southern country house as in one at the north, though more servants are employed and more accommodation is needed in the buildings especially devoted to their use; for the very good reason, that it requires twice as many negroes to perform the domestic drudgery of an establishment at the south as there would be needed in a residence of the same size, and for the same style of living at the north.

In the accompanying design (see FRONTISPIECE,) we have chosen a modification of the bracketted Venetian style, as best adapted, by its broad projecting eaves (with

three feet of projection,) and its ample veranda, for most parts of the south. There is a double value there, in these wide spreading roofs; first, in the greater coolness of the walls or sides of a building, which are protected by their shade from the direct rays of the sun during all the hottest part of the day; and second, in the good effect architecturally, produced by the strong contrasts of light and shadow by such projections.

In the plan (frontispiece,) of this house, we have practiced a very simple species of contrivance, by which the size of the first floor is considerably increased, so that a villa-like accommodation is obtained in a house only about 30 by 42 in the clear measurement. This is done by building the veranda of the same height as the principal story (12 or 13 feet,) and enclosing that part of it which is in the rear.

By this means we get a library 16 by 20, (which would otherwise be but 16 by 10 feet.) The letters *a b*, show the line between the house and enclosed veranda; and the opening here should be covered by a strong gird or beam, to support the wall above, and if necessary brackets may be placed at *a b*.

In the rear of the hall is a back porch,—a part of the veranda that may be left open. Adjoining it is an entry or passage way, five feet wide, for the servants to pass from the dining-room to the detached kitchen, without the necessity of entering the back porch or hall. Along side of this entry is a large store-room (also part of the enclosed veranda,) 10 by 10 feet. This is the larder and pastry room, under the care of the mistress of the house; and adjoining it and the dining-room, is a pantry and China closet.

The dining-room is a spacious and airy apartment, 16 by 24 feet, with a bay window on the side, opening down to the veranda. The hall is 10 feet wide; and the parlor and library, on the opposite side, communicate by sliding doors. A single fire-place would be sufficient for both of these rooms at the south. In some families, where there is an invalid, it might be desirable to make the library a bed-room.

The second floor, fig. 98, shows five good bed-rooms.

We have shown the covered passage to the kitchen, and part of the kitchen itself, in our sketch of the front elevation of the house, merely to convey an idea of their effect; though the position of these on the plan is in the rear, and not on the side of the house. This, however, is a mere matter of locality; as the kitchen and other out-buildings will, of course, be placed on the side offering the greatest facilities for their uses, and, at the same time, keeping them most in the back ground.

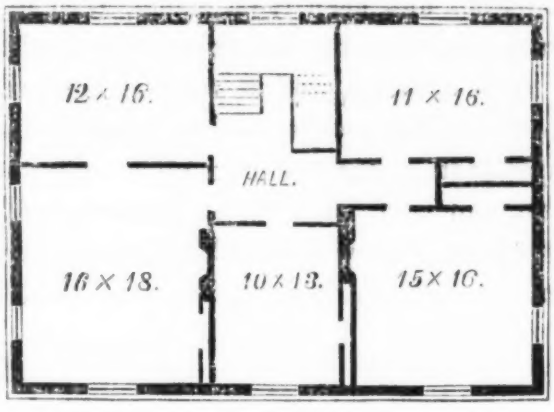

Fig. 98.—*Second Floor.*

Every house at the south should have a *ventilator* on the roof, connected with air-ducts, leading to the cellar. This would maintain a circulation from the lowest to the highest part of the dwelling, and prevent the accumulation of hot air under the roof. *Emerson's ventilator*, now extensively used about Boston, is the best yet known in this country, and may be had both in

Boston and New-York. A very simple and excellent mode, where this is not at hand, is to have the roof of the house pinad in its highest part. Over and around this opening, build a ventilator, by erecting a wooden frame about four feet square and three or four feet high, with a roof corresponding with that of the house, and sides composed of Venetian blinds. Into this ventilator would rise all the air of the garret, as it became heated. But in order to maintain a *circulation* in still mid-summer weather, when the air outside and that inside are nearly the same temperature, there should be two or three air-ducts, or canals, leading from the garret to the cellar, or space under the house. These may be mere wooden boxes, or hollow spaces, passing up in the walls of the house, or like flues in the stacks of chimneys, or through closets from one story to the other. In these passages the fresh and cool air will constantly rise, to replace that which becomes heated and passes off through the ventilator at the top of the house.

There should also be an aperture through the ceiling of the hall of the second or chamber story, directly under the ventilator of the roof. Through this the heated air in the upper hall will pass off; and thus a more agreeable temperature will be maintained in both stories.

This house, which gives all the accommodation of many villas at the north, could be built at the south for half their cost,—owing partly to the manner in which the accommodation of the house is increased by enclosing the veranda, and partly to the fact that no filling-in or extra warmth in the wall or frame is required in the southern states.

Comparatively little attention has been paid to tasteful and convenient domestic architecture at the south, and we shall be glad to receive criticisms and suggestions from our southern readers.

THE KUM-QUAT—A HARDY, DWARF, ORANGE TREE.

THE orange tree, in all its varieties, has hitherto been an exclusively southern luxury,—refusing to grow with us, excepting with protection in winter.

Here is a little dwarf tree, however, (*Citrus japonica*,) brought by Mr. FORTUNE, the collector of the London Horticultural Society from Japan, which will, no doubt, turn out to be quite as hardy as the Wistaria and the Tree Pæony, and will, therefore, be a novelty highly useful and ornamental in our gardens and shrubberies. The fruit, though too acid for the palate, makes a capital preserve; and the juice will doubtless be useful in the same way as that of the lime or lemon.

We have a small tree growing in our own grounds, which was kindly sent us by Mr. RANCH, exotic florist, near Greenwood Cemetery, Brooklyn. We believe Mr. BUIST, of Philadelphia, and probably other nurserymen, now have it for sale, so that amateurs can make trial of it in various parts of the country. There can be no doubt that it will stand the winter without protection wherever that now rather familiar shrub—the evergreen Japan Euonymus—has proved hardy.

We quote the following remarks, respecting this valuable little fruit shrub, from Mr. FORTUNE's own account:*

* Journal London Hort. Society, iii, p. 239.

"This species, long known to botanists, and to those who have visited Canton, was one of the plants which Mr. REEVES recommended me to send home to the horticultural society. In the south of China great quantities of it are grown in pots; and hence it is met as a common plant in the well known nursery gardens at Fa-tee. It is, however, evidently of a more northern origin; for I met with numerous groves of it on the island of Chusan, and elsewhere in that part of China, where it grew in far greater perfection than it does about Canton. It seems also to be largely cultivated in Japan, where it has been seen and described by Japanese travellers,—such as THOMBERG and SIEBOLDT.

"The Kum-quat groves of Chusan are formed on the sides of the lower hills, in those situations where the tea-shrub (*Thea viridis*,) flourishes. The plants are arranged in rows, about four feet apart, and do not attain a much larger size than about six feet in height; from three to six feet is the size they are usually seen. A small kind of orange is also found in these groves; but good oranges, such as those known in the south, as 'Mandarins,' and 'Coolies,' are entirely unknown; indeed, the Chusan winters would be far too cold for them. This shows, therefore, that the Kum-quat is of a much hardier nature than any of the plants belonging to the orange tribe with which we are acquainted in gardens.

"The fruit ripens late in autumn,—being then about the size of a large oval gooseberry, having a sweet rind, and a sharp acid pulp. It is largely used by the Chinese as a preserve, and very frequently finds its way to England as presents to those who have friends in China. Preserved in sugar, according to the Chinese method, it is excellent.

Fig. 99.—*The Kum-quat, or little Japanese Orange.*

"In China, the Kum-quat is propagated by grafting on a prickly wild species of Citrus, which seems of a more hardy nature than the Kum-quat itself. This fact should be borne in mind when the plant is increased in this country; otherwise we shall have a comparatively hardy plant growing on a tender one."*

Mr. FORTUNE further remarks that the Kum-quat groves in the island of Chusan, (a cold part of China,) were among the prettiest sights that came under his notice; particularly when the fruit was ripe, hanging in profusion over the bushes, and contrasting so well with the clear green foliage.

Dr. LINDLEY adds, that "this plant, as cultivated in the London Hort. Society's garden, resembles a dwarf, small-flowered orange tree, with thinner, smaller, and narrower leaves. Its fruit is as Mr. FOR-

* We commend this to the attention of nurserymen here. If the Kum-quat is ever so hardy, it will not stand if budded or grafted on the common orange, or lemon stock. It will be safest to raise it from cuttings. ED.

TUNE describes it; but its bright orange rind is not very fragrant until it is cut or scraped, when it becomes highly agreeable. The skin is not much thicker than that of a gooseberry, and contains five cells, filled with very acid pulp, resembling that of the Lime. It will no doubt make an excellent preserve."

ON PLANT POTTING.

BY WILLIAM SAUNDERS, NEW-HAVEN, CT.

PREPARING THE SOIL.—Without entering into a detailed inquiry upon the relation that exists between the soil and its different vegetable productions, or attempting to enumerate the many different combinations of soils that have been recommended for various plants, I at once remark, that for potting purposes, the physical texture of the soil is of more importance than its chemical constitution. I am well aware of the many very widely different opinions that have been held on this point, even among scientific men; but as "facts are stubborn things," I will confine myself to what I have found in practice to be most suitable.

The organic part of plants generally amounts to about nine-tenths of their whole bulk; and as this matter is chiefly produced from, and through the influence of, atmospheric air and water, and these being largely extracted by their roots as well as by their leaves, it points to the propriety of having the soil in a condition to allow an unimpeded access of these gases to the roots of plants.*

For some years I have used nothing but *turfy loam* for the various purposes of potting, suiting it to different plants by the addition of charcoal, pebbles, and sand,—being guided in the proportion of these latter substances by the nature of the roots and general habit of growth; and as by the judicious application of manure water, when and where requisite, I obtain, through simpler means, all the advantages that can be derived by the use of the various mixtures recommended under the name of composts. I therefore look upon these, in many cases, minute proportionals of differest soils and manures, as being altogether unnecessary.

There is by far too little importance attached to the aeration of soils; by bringing them in contact with air both the mineral and vegetable ingredients are decomposed, their latent powers of action drawn out, and rendered directly available for the purposes of vegetation. Hence the advantages of trenching and subsoiling, the freezing and pulverising of soils; and though it is impossible, in the present state of knowledge, to trace all the operations of the various agents that are daily producing changes in the animal, vegetable, and mineral systems, we know that in the absence of air and moisture, substances may remain unchanged; but under their combined influence, the most imperishable must ultimately succumb.

In collecting soil for potting, I prefer turves cut from a dry pasture, secured in dry weather, and piled in a heap until wanted for use. If these have been procured from soil of a retentive, adhesive nature, it can be corrected by the addition of

* At page 273 of the present volume, a correspondent infers that air is useless at the roots of plants. How he came to make a statement so diametrically opposed to the investigations of scientific, and the experience of practical men, I am at a loss to imagine. Surely not by the analogical reasoning he there indulges in.

sand, charcoal, &c. Charcoal is both a chemical and a mechanical agent. Its value as a manure is derived from its property of absorbing moisture and various gases—particularly ammonia. A celebrated chemist says—"charcoal is capable of being used with advantage in abstracting the ammoniacal and other salts, which gives its value to the liquid of farm-yards. Experiment has shown, that when filtered through a bed of charcoal the liquid escapes without colour, and almost without taste, while the charcoal is itself converted into fertilizing manure." Such is the theory of its action; and its practical efficacy has been sufficiently proved to rank it as a valuable ingredient in soils.

The heap should be frequently turned over, to expose every part of it to the influence of the weather, and preserve it in a healthy state; and that it may be of easy access during winter, it should be kept under cover, and always used in as rough a state as the size of the pots will conveniently allow.

Preparing the Pots.—In the first place, these should be thoroughly clean and dry; and as complete and efficient drainage is indispensable, the material used for this purpose should be in quantity corresponding to the size of the pot. Broken pots, or *crocks*, as they are generally termed, are most in use; but charcoal, bones, bricks—broken up—or small stones, will answer this purpose equally as well. When the pots are large, a good system is to invert a small pot in the bottom, filling the space between it and the side of the pot with the drainage. In ordinary cases, a large piece of crock is laid over the hole in the bottom of the pot. This should be placed with its rounded or convex side downwards, to prevent the ingress of insects or worms. A still better method is to cover it with a small piece of perforated zinc, as it offers no resistance to the egress of water, and effectually prevents any intruders. Above these, place a sufficient quantity of the broken material, and cover the whole with a layer of moss, or the roughest parts of the soil. Moss is preferable, as it parts freely with superabundant moisture, still holding in suspension a sufficient portion to be of service to the roots, and of which they will gladly avail themselves in any emergency.

It was a long established and deeply rooted opinion, that plants could not be cultivated with any degree of success in hard burned (or glazed) pots; and even yet, we occasionally meet with some who tenaciously cling to the idea. The objection to them is, that the soil next the pot is always in a cold, damp state, and apt to destroy the roots. That this would be the case when the drainage is imperfect, the soil not properly prepared, and water given in excess, might be expected. And as a porous pot, by absorbing and giving off moisture, renders this unskilful management less apparent, it is preferred. But this is no argument in its favor. When that indefatigable horticulturist, Mr. Beck, Isleworth, England, first brought his slate pots into notice, they met with a very unfavorable reception. But when he subsequently carried off prizes at the London horticultural exhibitions, with plants cultivated in these pots, unsuccessful competitors were fain to acknowledge the advantages which he possessed; and what they before condemned, they now looked upon as a necessary accompaniment of success. The advantages that slate and hard burned pots have over those that are soft and porous, are, that the soil is kept equally moist, and less water is requisite; as porous pots rapidly absorb the moisture from the soil, especially in hot, dry weather.

It would be a decided improvement upon

the pots in general use if they were made three times their usual thickness. As we frequently find them, they are nothing but a mere shell. In such pots, the roots of plants are injuriously acted upon by scorching sun and parching winds; whereas, if they were of a thicker substance, the roots would not only be uninjured by the sun, but the gentle heat then imparted would be productive of good.

Preparing the Plants.—A plant should not be potted when it is very dry, nor when soaked with wet. If in the former case, it is very likely to remain so. As the water will pass through the fresh soil without penetrating into the old ball of earth; and if in the latter state, it is not in a very good condition to be surrounded with an additional layer of eatth. When the roots are thickly interwoven they should be carefully disengaged, that they may be spread out into the fresh soil; but in shifting young, healthy, growing plants, with the roots just reaching the side of the pot, they should not be disturbed, as it is important to preserve the smaller fibres, upon whose action the health of the plant chiefly depends.

I have seen some persons reduce the ball of earth, by cutting off all the matted roots, with perhaps an inch of soil,—and after paring it into a *nice* shape, and depriving the plant of all its most valuable spongioles, place it into a pot perhaps not much larger than the one it previously occupied; and after giving it a daily quantum of water, with the additional care of shading and syringing, it was considered a matter of astonishment that it did not grow. It is just in such cases as this that complaints are likely to be raised against hard burned pots,—want of proper soil, and similar excuses; as few persons wish it to be understood that there is any blame attachable to them, or any deficiency in their system of management. Such practice is no doubt of less frequent occurrence than formerly; and I would not allude to it were I not aware that it may occasionally be met with where something better might be expected.

In cases when the plant is unhealthy, and the roots in unfavorable soil, or in repotting deciduous plants that have been kept in a state of rest during winter, the ball of earth should be broken up and nearly all shaken out, that the young roots may at once enter the fresh soil.

It is also necessary to examine the stem, in order to guard against deep planting. The ordinary advice—"Never plant deeper than before," is well enough, *provided it was not deep planted before.* But this is too frequently the case to be passed over in this way; and when plants are raised from cuttings, they must necessarily be deeper planted when young than is consistent with their future welfare; the soil should be cleared away until the base of the stem is level with the surface. I have seen valuable plants lost through neglect in this respect, even after they had attained considerable size.

Shifting the Plants.—When the large, or one-shift system of potting was first introduced, it was confidently and zealously advocated by some, while others as strenuously opposed it. It is generally the lot of all improvement to encounter opposition. And although, in some instances, the advocates of this system rather overrated its merits, yet many opposed it without giving it a trial, and others failed for want of sufficient knowledge to carry out the principle. What is meant by the one-shift system is simply this,—that a plant may be taken from the smallest sized pot, or even out of the cutting pot, and placed at once into one of the largest size, that from its nature it is likely to occupy,—the advanta-

ges being a larger and speedier development than when subjected to the many checks consequent upon the progressive, or oft-shift system; that is, shifting from a 3 to a 4, from a 4 to a 5-inch pot, and so on, progressively, as the plant increases in size. That this method may be adopted with great advantage in the case of robust, free growing plants, is very evident; and its greatest advocates never contended that it was equally applicable in all cases. In small green-houses, nothing would be more inconsistent than having a dozen large plants to the exclusion of a hundred smaller ones of different varieties. The unsightliness of small plants occupying such large pots has also been urged as an objection.

Another objection that has been raised against placing a small plant in a large body of earth is, that owing to atmospherical attraction the roots of plants have a natural tendency to proceed in a horizontal direction, until they reach the side of the pot, where they will soon ramify, and form an interwoven mass, enclosing a large portion of soil, comparatively free of roots, which, by repeated waterings, is soon rendered sodden and unfit for the few roots it may contain. This would certainly be a weighty objection if such was in reality the case; and undoubtedly such would be the result if the soil was very close and compact; but this objection has little weight when the pots are well drained, the soil lumpy and well intermixed with pebbles, charcoal, &c.—the whole mass of soil being thus rendered very open, water percolates freely, and air and heat immediately take its place; atmospheric attraction being equally balanced, lateral extension of the roots is checked, and they ramify with regularity throughout the whole.

Whatever may be the advantages of this system of potting, it can never be generally adopted. Every person's circumstances will not admit of it. Neither would I advise any but those who are thoroughly acquainted with the management and requirements of plants, to attempt cultivating any of the small rooted, hard wooded plants on this mode; as it requires great care in preparing and arranging the soil for such plants as Epacris, Erica, Leschenaultias, Boronias, &c., as well as the exercise of considerable judgment in their future management; but for soft, free growing plants, as Geraniums, Calceolarias, Brugmansias, Cinerarias, Fuchsias, and such like, it is the best that can be adopted; and when systematically performed, it presents a great advantage in obtaining fine specimens in a comparatively short time.

Fig. 100.

It is necessary, especially in potting hard wooded plants, to make the soil moderately firm. It should not, however, be *rammed*, but rather fitted in, spreading the roots into the fresh soil, finishing off with a level surface, and leaving sufficient space for watering. The above representation of a

plant, shifted from a 3 to an 8-inch pot, will render the operation more easily understood by those who require such information.

A, represents a large crock laid over the hole in the bottom. B, the layer of draining materials. C, layer of turfy and rough portions of the soil. D, soil in which the plant is potted. And E, the old ball of earth, the roots in which should be spread out in the fresh soil, as potting proceeds. The other parts will be easily understood.

WILLIAM SAUNDERS.

New-Haven, January 2, 1850.

REVIEW.

TRANSACTIONS OF THE NEW-YORK STATE AGRICULTURAL SOCIETY. *Vol. VIII*—1848.

HERE is an octavio of 975 pages, abounding with matter instructing to both practical farmers and scientific men. If the State Society's labors were limited to the production of such a volume as this annually, the institution would be entitled to the gratitude of all who are interested in agriculture, and we are glad to perceive that under the supervision of the worthy Secretary Mr. JOHNSON, the Transactions steadily increase in value every year.

The State Agricultural Society however is an institution of greater value and importance to our community than what arises from the publication of these annual records of farming skill and science. It is becoming a centre point, a nucleus around which the intelligence of the farming class is beginning rapidly to crystalize, and will speedily become a powerful instrument to elevate and improve the condition of our agricultural community. The early discussions touching the Agricultural College, which took place in the Society's rooms at Albany, were the first definite expressions of what has become a great public sentiment now—that the farmers of New-York demand a substantial agricultural education. Of the more direct practical good, which results from the application by a society of some system and order in farming economy, some idea may be gathered from remarks like the following, made by the secretary of the society at one of the discussions.

Mr. JOHNSON here alluded to the great good that had resulted to the American farmer from the accuracy in relation to the measurement and return of the crops, which the society had in later years insisted upon. It led him to watch closely the details of his farming. Many of the counties had, in their local society operations, attained a degree of accuracy so complete, that one set of papers would answer both for the State Society and for them, while others were yet lamentably loose and deficient. A gentleman in Massachusetts had offered the use of his farm to any one who would raise 60 bushels of Indian corn to the acre; he doubting that it could be grown. One of our farmers had produced the most authentic proofs of his having raised 123½ bushels to the acre, in Oneida county. In Jefferson county 110 bushels of oats to the acre, of 41 lbs. to the bushel, had been raised the past season. In Oneida county, one field of about ten acres had yielded 112½ bushels of oats to the acre, over the entire field, some years since. "If," adds the secretary, very pertinently, "the proper knowlege of culture were universally made known, would our farmers be content with raising 20 bushels of corn to the acre?"

One of the most interesting papers in

this volume, is the able address of the President J. A. KING, Esq., before the Society of Queens county, Long Island, where Mr. KING resides. It is valuable on account of the statistics of agricultural value and production employed in that part of Long Island, which conclusively prove thât farming may be carried on under circumstances absolutely requiring the employment of capital, and that capital may be well employed in developing the resources of the soil. In Queens County, according to Mr. KING, with a population of 32,000, there are 125,636 acres of improved land, (in grain 46,906, in meadow and pasture 73,710 acres) and the total value of the agricultural products is $1,764,604. The nett receipt gives a profit of 10 per cent on $8,000,000 of agricultural capital, or $7, nett per acre, on 125,000 acres of improved land, and $17 per acre on the 50,000 acres of arable land. This is worthy of the consideration of those who in the less fertile parts of the State (for Long Island is by no means naturally fertile) consider agriculture a "poor business." The answer to the inquiry regarding the success of Queens county farmers, we more than suspect lies in the fact disclosed by Mr. KING, that they are mostly "small farmers"—that is to say, they are not made poor by owning large farms, as "the average size of the farms will scarcely reach 80 acres." And the *manure* that is so liberally applied—what do our readers think these "small farmers" of Queens county pay for manure in a year? No less a sum than $227,000, to say nothing of that made upon the land. Small farms, highly manured, and well cultivated—that is the policy of all farmers near large cities.

It is impossible for us to notice in any extended manner the contents of this volume of Transactions. We cannot however wholly pass over the admirable and very complete prize essay* on Indian corn by MR. SALISBURY, giving an accurate analysis of the composition of every part of the plant, during all stages of its growth, and furnishing data for carrying its culture to perfection in all soils. Another article by Dr. LEE, on the *Philosophy of Tillage* has already been copied into various agricultural papers, and is full of plain suggestions on the science of farming, to those who wish to learn; and a third on Draining, by JOHN DELAFIELD, Esq., the successful farmer of Oaklands, is full of clear and sensible directions for performing this important step in the amelioration of wet lands.

We must not forget an excellent report on Fruits, by Dr. WENDELL of Albany, accompanied with outlines of select varieties recommended for general cultivation; among which we notice the Autumn Strawberry and Mother apples, two very excellent and comparatively new sorts.

This volume is printed by the State, and forty copies are sent to every County Society, for distribution. A vast and rich field is still before the New York State Society, and we are glad to believe from annual testimony like this volume, that the executive committee busy themselves about the work in good earnest.

* For which the Society's premium of $300 was awarded.

FOREIGN NOTICES.

THE MANETTII ROSE STOCK.—The following letter from Mr. Appleby, of York, will perhaps save you a little labor; it is all true.

"When you were here, in September last, you requested me to send you an account of my success with the Rosa Manettii as a stock for roses generally. I got a few (I believe about 20) from you about four years ago, and having great faith in what you said respecting its capabilities, I was determined to give it a fair trial, and accordingly I endeavored to make the most of it. I planted them out as stools, and the following winter I took the crop of cuttings and planted them in the usual manner, and I am not aware that I lost one of them. Those I also planted out as stools, and the crop of cuttings this time was planted in rows 18 inches apart and 6 inches in the row. This was in the month of March, 1847, and in August following they were all fit for budding. I say all, because I do not think that ten in a hundred died, although they were fully exposed to the weather in an open quarter. Some of these were budded as late as the last week in September, and still they took well generally. They broke freely in the spring following, and by the autumn many of them were as high as myself, which quite delighted me, for I had never seen anything in rose culture like them. I now valued Manettii cuttings like gold, and I ordered my men not to throw away an inch that was likely to make a plant. In the spring of 1848 I was enabled to make a tolerably good plantation of them; and although they were planted late (I believe in the beginning of April,) and the season set in dry, I nevertheless lost but few of them; but they were late in getting hold of the ground, and I did not get them budded until the end of September, still the buds took well as before, and you were yourself a witness to the progress they have made. There are many sorts amongst them that I could never get to thrive—in fact, scarcely to exist—upon the briar, that are now (in one year) from 3 to 4 feet high, and strong in proportion; and others (that are free growers) I have 6 feet high, with from 6 to 12 shoots from each bud. I will here enumerate a few sorts that are known to be bad growers upon the briar, and state the height which they have attained in one season. I will begin with Eblouissante de la Queue (Gal.,) grafted in April last, now 3 feet high and strong; Chateaubriand (Damask,) also grafted at the same time, 3 feet; Perle des Panaches (Gal.,) budded in September, 1848. now from 3 to 4 feet; Tricolor de Flandres (Gal.,) budded same time, 3 to 4 feet; Cynthie (Gal.,) budded same time, 2 feet; La Cherie (Damask,) budded same time, 2 feet; Crimson Perpetual, budded same time, 3 feet; Rivers (Laffay's,) same time, 4 feet, and many others of similar habit of growth have made the same progress. Then, of stronger growing sorts, the following (which were all budded in September, 1848,) are now respectively the heights quoted, viz.: Bourbon (Splendens,) 5 feet; Comte Plater, 6 feet, very strong; Diane de Poitiers, 6 feet; Madame Stoltz, 4 feet; Dombrowski, 5 feet; Moss Laneii, 5 feet, and some of them with a dozen shoots from one bud; Do. Lancel, 4 feet; Do. Louis Colet, 4 feet; Do. White Bath, 4 feet; Do. Blush, 5 feet; Do. Crimson, 5 feet; Do. Malvina, 5 feet; Do. Moussue Partout, 5 feet; Do. Do. Presque Partout, 5 feet; Do. Do. Metz, 5 feet; Comte de Flandres (Gal.) and Spotted Provence, 5 feet; and in Bourbons, I have Acidalie, 3 to 4 feet; Desgaches, Cardinal Fesch, and Madame Nerard, B. Queen, and Anne Beluse, 2 feet; (these have been in bloom from last May, and are still covered with buds and bloom;) Princesse Clementine, Emilie Courtier, and several others are from 2 to 3 feet, and have been constantly in bloom all summer. In the Hybrid Perpetuals I have Robin Hood, 3 to 4 feet, and complete bushes; Cornet, 5 feet, very strong; Sidonie, 4 feet, and most robust. Every plant, if standing singly, would have the appearance (in size) of a large Dahlia plant at this season of the year. Geant des Batailles would have been quite as large had they not been cut down for buds. Baronne Prevost, Mrs. Elliot, Duchess of Sutherland, La Reine, Madame Laffay, Wm. Jesse, and several others are all similar plants; and Jaune Desprez, with some of the new Prairie Roses budded on this stock are 10 feet high in one season. The quarters of stocks which you saw (newly budded) when you were here in September, were all planted in March last, and are now from 3 to 4 feet high, and many of them an inch in circumference. They are budded with all the best sorts of roses; and I have especially endeavored to get those sorts worked upon them that have usually been bad growers (though some of the best roses,) and of which I could never get any stock, and I have no doubt but the result will be to my satisfaction. Another year I intend to bud those stocks with Bourbons, Hybrid Perpetuals, Chinas, &c., from 1 foot to 3 feet high, as dwarf standards; and I feel confident they will form beautiful heads. So confident am I of the superiority of the Rosa Manettii over every other stock for roses, that I shall never again plant any other, excepting for full sized standards. All other stocks, in my light sandy soil, throw out quantities of suckers, which are constantly robbing the bud of its support, to say nothing of the labor they occasion to get rid of them; but this

stock does nothing of the kind, unless a stray bud has been left on in dressing them, and then it merely comes up close to the stem, and is easliy got rid of, as they never produce stolons or underground suckers. Another advantage is, that it thrives well on light soils, where the briar will not thrive at all; and this does away with all the objections that some parties have to worked roses, as all roses seem to do well alike on it—better, in fact, than upon their own roots, and no doubt they will bloom better. Besides, many roses on their own roots are constantly throwing a quantity of root suckers, and ultimately run wild. The above is a faithful account of my success with the Rosa Manettii as a stock for the generality of roses."

The history of the Manettii stock is as follows: Some 12 or 15 years since a Signor Crivelli, of Como, attracted by an article in Loudon's "Gardeners' Magazine," wrote to me, offering to exchange some seedling Italian roses for choice named varieties. I sent him a small collection, and in return received from him some seedling roses; among them were Rosa indica grandiflora, and Rossa indica Manettii, two very small plants. These he described as being Hybrid China Roses, and most valuable roses for stocks in the dry climate of Italy. I soon found that although so much alike in habit as scarcely to be distinguished, they differed most materially in this respect; the former could only be propagated by layers, while of the latter every cutting grew. I gradually increased my stock of the latter, and now propagate from 40,000 to 50,000 annually. As with all new articles in gardening, I had to buy some experience, for I found if I grew them in a rich soil and budded them at the usual period, the buds rotted; they appeared to be drowned in the superabundance of sap. At last I saw it was necessary to plant them in poor soils, and bud them in September.

I presume this stock has found favor in America, for the last season I received an order from one house for 20,000. *Thos. Rivers Gardeners' Chronicle.*

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Calla Æthiopica.—Here, in our fragery (a ditch so called,) this plant thrives amazingly under the most primitive mode of culture. Indeed the only secret connected with its most satisfactory growth, seems confined to the protection of its root from frost. The water in which it grows may be sheeted over for any ordinary length of time with ice of any reasonable thickness, so that it does not actually reach the root; moreover, it seems equally indifferent about the quality of the water, or description of soil in which it is located. Some 20 years ago, I had four roots planted amongst some other aquatics in the above named ditch, with about 18 inches of water, supplied from an artesian bore,* in one end of which the mud was at least a foot deep; in this two of the roots were planted. The other end was bare gravel, so much so that we had to put stones upon the two other plants, by way of anchor, to keep them from drifting till they made a few roots to hold themselves to the bottom. Three of them are now large masses (the fourth was killed the first severe winter after planting, the water not being deep enough, about 8 inches, to keep the frost from the root,) and grow and flower equally free on the gravel and in the mud; and a splendid appearance they have from five to six weeks every May and June, having from 16 to 20 flowers on each plant. Since first planted they have been two or three times cut down to the surface of the water (foliage as well as flowers.) at the end of April or beginning of May, by frost, but without receiving a permanent injury. By the end of July they had completely covered their elegant leaves; and although the second crop of flowers was neither so large nor so plentiful as those cut off, still they made a very tolerable show in the August and September following, and contrasted finely with the very different habit of some yellow and white water-lilies, their neighbors; indeed, I think it might be worth while to cut one of the plants down every spring, for the sake of the autumn flower. *Richardia, Nov.* 20. —There are at present growing, in a small pond in the kitchen garden at Castle-hill, two plants of the Æthiopian Calla, which have been in their present situation for at least seven years. They were formerly standing in pots in the green-house, and were removed to their present situation in the same pots, merely sinking them to the bottom of the pond. I may observe that since they were removed to their present station they have increased to a large size, and at present stand at least 2½ feet above the water. They are occasionally cut down to the water's edge during winter, but never fail to produce abundant blooms during summer. The pond, in which gold fish are kept, is about 2½ feet deep, is formed inside of brick, and supplied with water from a jet in the centre. *A. Saul. Castle-hill, Nov.* 21. *Ibid.*

* This water coats everything with rust in an incredibly short time, and many plants we have occasionally watered with it have died. Indeed, one very dry summer, we thought to have our lawn greener than other people's, and used this water very freely; the consequence was that the grass died out in large patches, and yet these aquatics grow like willows in it. By the way, some weeping willows planted by it canker off in large branches.

DOMESTIC NOTICES.

VISITS TO NURSERY GREEN-HOUSES—*Dear Sir*: There is not in my opinion, any thing will tend more to improve the cultivation of Green-House plants, than faithfully reporting what progress is making in the different establishments devoted to that purpose. I recently had the pleasure of calling at several such gardens, both in the city and vicinity of New York, on which occasion I made a few notes for the pleasure of your readers. The following are those to which I would call special attention, viz: Mr. BOLL'S and Mr. MANTELL'S, at Bloomingdale. Mr. LENOIR'S, do. Mr. DUNLAP'S, Harlem. Mr. PHELAN'S, New York city, Mr. FLOY'S, Harlem, and the Messrs. HOGG'S, near Yorkville.

Mr. BOLL'S, is an extensive establishment, but limited to a few generas, of which the Camellias are his principal stock. There are two large houses devoted to this family, one containing large specimens; and flowering plants of every size; the second is principally filled with small plants; in a third I noticed a splendid display of *Daphne odorata*, and *Rubra*, a great show of common Chinese Primrose, Otaheite Orange, and several plants of *Araucaria imbricata*, from 12 to 18 inches high. There are two large Rose-Houses, in one of which the plants are planted out in the borders, and the other well stocked with the newest and latest kinds, among which I noticed a quantity of the pretty double *Spirea prunifolia*, showing its pure white blossoms.

Mr. MANTEL'S. I took but a passing glance at the collection here. There is a fine Rose-House, showing a tolerable display of buds; the front border, in which is planted a single line of roses, is 3 feet wide, passage about 18 inches wide; and 15 inches lower than the level of the borders; back border 9 or 10 feet wide, and the roses planted out as in the front; a line of Mignonette is planted to the right and left of the gangway, and is growing luxuriantly, but showing no flowers in consequence of its being 5 or 6 feet from the glass. This place can justly boast of as fine a conservatory, as I have seen for some time past. It is span-roofed, and about 170 feet long, well adapted to grow the choicest productions of any climate. One half of this beautiful structure is occupied with Otaheite oranges. They look nice in fruit, and may fetch a tolerable price. Still is it not a pity that this fine structure should be filled with plants that might be wintered in a cellar? The remainder of the house is occupied with a miscellaneous collection, among which I noticed some specimens of Polygalis, and two (once) beautiful specimens of *Araucaria Braziliana*, that would be a credit to the southern forests, dwindling in decay. I am sorry I was deprived the pleasure of transmitting further details of this fine house. Your readers may smile when I tell them, that no sooner did Mr. MANT. LL'S gardener see me taking notes, than he desired me to leave the premises. If this *is* Mr. MANTELL'S special arrangements, I must say it does him no great credit.

Mr. LENOIR'S, though small, is interesting.—There is two good houses, one mostly occupied with Heliotrope all in pots, arranged on the stage very near the glass, and in beautiful bloom. The second house is recently built, and well filled with a miscellaneous collection, consisting of Camellias, Gardenias, Metrosideros, Daphnes, Azaleas, &c., &c.

Mr. DUNLAP'S, corner of the 8th avenue and 116th st., near Harlem. This is the most extensive that came under my observation; although not possessing the recent discoveries of modern botanists, it will not fail to awaken in every zealous connoisseur of plants, many a fond recollection of by-gone days. The glass here consists of two Rose-Houses, one Propogating-House, two large Conservatories, one Geranium-House, three large Houses, like pits, and an innumerable number of frames. One of those Rose-Houses, is really so deserving, that I cannot find words to do it half justice. It is span-roofed, and about 50 feet long; the pit is in 3 parts, of which the centre part is 7 feet wide. In this are planted three lines of Lamarque Roses, one line in the middle, and another at the right and left. This middle line is the glory of the house; it extends its branches in every direction, leaving the two side lines nearly worthless. The stem of one of these giant roses, measures 8¼ inches in circumference near the surface, and 4¼ at 4 feet from the ground. The others are of various sizes, nearly approaching these in magnitude. A passage of 18 inches wide, and 2 feet under the level of the borders, goes round the house. The side borders are three feet wide, in which are planted Lamarque and other roses, trained up the rafters, all growing vigorously and showing a profusion of bloom. The Propogating House, is 50 feet long, span-roofed, and heated with hot water. The plants here consist of small stove and warm green-house species. There is a large plant of *Bignonia venusta* trained the length of the roof, at one side. The conservatories are large and spacious. One occupied with a miscellaneous collection, the other with Camellias of various sizes. In the pits already alluded to, are Verbenas and Pinks, small roses, and numerous other half-hardy plants. Any attempt at referring to one-half the plants here would weary your readers, neither did my limited stay permit me to make note of them. I cannot take leave of Mr.

DUNLAP'S, without calling attention to his city establishment at 635 Broadway, which is a repository for every thing that is useful, curious and ornamental. Baskets, Stands, Vases, Pots, Glasses, and Horticultural Implements, vegetable and flower seeds, and after passing through a flock of *warblers*, we enter a spacious conservatory, where a neat pond and fountain, will first attract the eye. This pond is filled with gold fish of every size, and surrounded by large plants, one of them in particular is a fine specimen of *Eutassa* (*Araucaria*) *excelsa*, or Norfolk Island Pine, from 15 to 17 feet high, and a beautiful plant of Cycas revoluta, (sago palm.) To the left is a giant stem of agave Americana, that flowered some years ago. There are good specimens of *Azaleas*, *Camellias* and other fine plants in this spacious building.

The boquet trade, is the great article of profit to the New York florists, and to Mr. DUNLAP belongs the merit of commencing a new era in our horticultural improvements. Having paid no less than $50 in premiums, (besides the usual price for flowers) to those gardeners who supplied the largest and best collection of flowers on the 31st of Dec. last,—advertisements having been inserted to throw the competition open to all commercial florists.

The premiums were awarded as follows, by Messrs. LODGE and HOPE, the boxes containing the flowers being numbered, and the names of the competitors laid aside.

First box, No. 5. 1st premium for greatest and best variety of flowers, to Mr. COLMAN, gardner to A. P. CUMINGS, Esq., Williamsburgh,	$10,00
Second box, No. 10. 1st premium to Messrs. PHALEN and SONS, New York, for best and most perfect ¾ blown Camellias,	10,00
Third box, No. 3. 1st prize to Mr. D. BOLL, Bloomingdale, for 100 best roses,	10,00
Fourth box, No. 7. 2d prize, D. BOLL, Bloomingdale, for 13 Camellias,	5,00
Fifth box, No. 6. 2d prize, J. LODGE, Senior, Westchester, for 13 Camellias,	5,00
Sixth box, No. 4. 2d prize, Mr. COLMAN, for Camellias,	5,00
Seventh box, Nos. 5 and 4, 2d prize, JOHN PEEBLES, Williamsburgh,	5,00
Total	$50,00

If our florists and amateurs were to form a committee, they might readily constitute a Horticultural Society, by which means suitable premiums could be given those who merit them for fruits, flowers and vegetables. This would be giving every person possessing a rood of ground, an opportunity to compete, and would greatly promote horticulture.

It is not a little remarkable that New-York, the largest city in the Union, has no Horticultural Society, though there are 30 or 40 such societies, in various parts of the United States. I am satisfied that our citizens, ladies and gentlemen, would willingly contribute to the encouragement of such shows, for the pleasure of seeing the many fine flowers, rare fruits, and choice vegetables that would be brought together on these interesting occasions, if some organization could be made, that would give to a Horticultural Society a popular character.

My remarks on the other nurseries, must be deferred till the next number. I am Sir, respectfully yours, *M. C. Williamsburgh, N. Y.*

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NOTES ON FRUITS.—This country is deficient in first-rate late winter Apples, that will keep until summer apples ripen. One bushel of good table apples, in April, May and June, is worth at least two bushels, of those of equal quality, ripening in November, and from that to February. Early ripening winter fruit is wholly excluded from foreign markets, upon which the farmer now relies for a remunerating profit. Short as the passages now are to Europe, the West Indies, and other parts of the world, we can select but four or five kinds of apples that will keep sound to the end of the voyage to England. I have but little hope that we can ever add the Northern Spy to the number. With us it has no thrift and vigor, and gives little promise of productiveness. Long keeping is a very important point, and one in which our assortments are very deficient. Must we not look to the West and South for a further supply? If they have seedlings of good quality, that with them keep till March, the same raised in New England might be expected to keep till June; as our fall apples become winter apples, when raised in the north part of the State of Maine. In view of the premises, is it not desirable to obtain scions from Mr. SUMMER, of his apple, Ferdinand?—Also Mr. E. J. CAPELL'S Davis and Grindstone, both named in the Dec. No. of the Horticulturist?

Will the "Old Digger," or yourself, be pleased to account for the fact, that Bartlett Pears do not crack when grown on scions set into a half starved stock of the St. Germain or White Doyenne? or why a scion of the White Doyenne Pear, when put into a large, healthy stock, standing in good soil, with ten other kinds in the same tree, should be the only kind that bore fruit that did crack?

In describing the flavor of pears, has there not been an improper use of the word vinous? It is justly applied to the Brown Beurre, but most aptly to Gansill's Bergamotte. If in the place of *vinous*—the more appropriate terms, *astringent* and *acid* were employed—nice tastes would be less frequently offended, and enthusiastic beginners in fruit culture, might not so often have their ardour cooled by disappointment. I am truly yours, *Stephen H. Smith. Smithfield, R. I. Jan.* 15.

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THE SECRETS OF NATURE.—DEAR SIR: Will the quotations from Liebig which you will find below, give us a key to the reasons why one fruit, growing on the same soil, in the same neighbor-

hood, is sweet and another acid,and why one fruit is juicy, and another dry; why one flower is fragrant, another offensive to the smell; why one herb is healing and another poisonous; why one is nutritious, and another without the nutrient quality; why the body of one vegetable structure is dense and hard, another loose and porous; why one will burn for hours in fire, and another consume in a moment; and why fruits and flowers put on an almost infinite variety of colors; and wherefore it is that the vegetable world assumes such a diversity of qualities, appearances and conditions. Yours, *C. Smith. Newport, N. Y. Jan.* 1850.

"A great many substances have been discovered among organic bodies, composed of the same elements, in the same relative proportions, and yet exhibiting physical and chemical properties perfectly distinct, one from another."

"A great class of bodies known as the volatile oils, differing widely from each other in their odor, in their medicinal effects, in their boiling point, in their specific gravity, &c., are exactly identical in composition—they contain the same elements, carbon and hydrogen in the same proportions."

"The ultimate atoms of bodies, do not penetrate each other; they are only arranged side by side with each other in a certain order, and the properties of the compound depend entirely upon this order. We may suppose that one atom combines with one atom of another element to form a compound atom, while in other bodies two and two, four and four, eight and eight, are united, so that in all such compounds, the amount per cent. of the elements are absolutely equal, and yet their physical and chemical properties, must be totally different, the constitution of each atom being peculiar in one body, consisting of two, in another of four, in the third of eight, and in a fourth of sixteen simple atoms."

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INTRODUCTION OF NEW PLANTS.—I have been engaged a day or two past in reading the correspondence of our early botanists, JOHN BARTRAM, and HUMPHREY MARSHALL, as recently published by Doctor DARLINGTON, and believe I entered somewhat into the feelings of the good, indefatigable and enthusiastic PETER COLLINSON, in his hopes of new plants and *seeds* to be obtained in the next autumnal excursion, and his disappointment when the beetle destroyed the butterflies, or when the rats fixed their habitation during the sea voyage in the box, to the entire destruction of the plants, and when again and again the ship arrived without some expected and ardently desired seeds or plants, or when having arrived it was found that their vitality had been destroyed in the passage. He in one letter gave notice that stocks continued to fall, and that he had thousands unemployed, which he did not know how to lay out—yet it was but a passing notice, and not repeated; the language is not earnest as for "the sod of Pyrola," or "the wasp's nest built in the bush." To minds fond of nature, this correspondence is extremely interesting, for although we consider the Pyrola and the wasp's nest as not very important, yet to citizens of the old world then, the discovery and acquisition of new and beautiful natural objects, were sources of pleasure and deep interest—and so they now remain to us; for as "westward the star of empire wends its way," hills rise o'er hills and alps o'er alps arise, and the difficulties and duties of the European Naturalists of the last century, have descended to their American brethern of the present, some of whom should step forward and perform for America what SLOANE, ELLIS, COLLINSON, and other worthies af their time, did for Britain, by introducing rare and newly discovered plants into this country. A wide field of labor of this kind is now opened, under very favorable circumstances, in introducing the vegetable productions of California, Oregon, Deseret and Mexico, into the well settled part of the original United States. For this purpose we enjoy advantages at present, that will decrease hereafter. Thousands, perhaps tens of thousands of our citizens have within the past year, gone to Oregon, California or Mexico,by various routes, a part of them by crossing the Rocky Mountains.—Our friends who have thus left us are men of more than usual enterprise and energy, and many of them have more or less acquaintance with natural history; there are probably few neighborhoods if any, from which some person has not departed for the western side of the continent, and therefore most persons who have an extended acquaintance at home, are probably acquainted with one or more persons now in some of those places. Our friends who have left us, find upon their arrival there, many species of plants and animals which they had never seen before; these, whilst new to them, they will regard as worthy of notice here, and will be pleased to transmit to us as memorials of former friendship, or specimens of the productions of their new homes. But time and distance will dim their memory of home and us, and when the novelty of the objects around them shall have passed away, they will distrust our grateful reception of seeds or plants which to them have become common and of little or ho value. In order to enjoy the advantages of our relative position, it is necessary therefore *immediately* to provide some way by which our friends there may transmit seeds or plants to us without difficulty.—If any Horticultural or Botanical Society would establish at each of the three or four towns on or near the coast of the Pacific, a place of reception for plants and seeds, and give notice of it, and agree with the regular packets, (that will be or are established to transport merchandize, to and from those ports) for the freight of such as may be furnished; and upon their arrival here, would furnish at the office of the Society, such packages as may be directed to private persons, upon the payment of expenses incurred, I believe that the plants of those countries would be speedily intro-

duced. If there is no existing society that would take charge of this matter, is there sufficient interest in the subject amongst our people to form a society for that purpose? I recommend this subject to thyself, and through the Horticulturist to its readers, desiring your attention to it, and if in your opinion, it is desirable to use measures for introducing the vegetable productions of the newly acquired territory, and also especially of the Rocky Mountains, and mountains nearer the coast of the Pacific, that such means may be employed as soon as practicable, as may be thought best suited to produce the effect. A large number of trees and shrubs of those countries have been described by botanists within the last twenty or thirty years, of which there are many that I suppose have not been introduced, among which are the following, described by Nuttall in his continuation of MICHEAUX's *Sylva*, viz. *Platanus racemosa Betula oregona, Arbutus Menzusii, Quercus Ganyarii* and *Douglassii, Cornus Nuttallii, Castanea chrysophylla, Tetranthera californica.* I observe that Europeau periodicals devoted to part of the purposes of the Horticulturist, give short notices of the introduction of new plants; such notices would interest many of its readers, Permit me to enquire, have any of the above named trees been introduced into the Northern or Middle States, and have any of the plants discovered by FREMONT, and by EMORY, and described in their Reports, been so introduced? To close as I began, with the correspondence of Bartram, I was surprised to find that fifty years had passed after the settlement of Pennsylvania before some of its most interesting trees and plants were sent to Europe, the *Magnolia acuminata* for instance; and yet upon consideration it is not more strange, than that it is so seldom planted here as an ornamental tree. *Alan W. Corson. Montgomery County, Penn.* 12 *mo.* 24, 1849.

There is a good suggestion in the above. Cannot the Massachusetts Horticultural Society, which has received such liberal bequests lately, appropriate something to the introduction of the grapes of Mexico, and the trees and plants of California. ED.

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MASSACHUSETTS HORT. SOCIETY.—We notice that this hitherto admirably managed society is losing nothing of its character for energetic action. At the annual meeting, last month, President WALKER made the following address, in which our readers will observe that he recommends especial attention to the art of design in ornamental gardening,—a step which we should naturally expect first from refined and cultivated Boston. ED.

Gentlemen of the Mass. Horticultural Society:

Your unanimous suffrages have again placed me in a position that demands my thanks for the honor conferred.

The past, the present and the anticipations of the future, cheer my path, as I feel assured I shall have your hearty co-operations in all my endeavors to promote the interest of the science of horticulture.

The year which has just closed has removed from us one of our respected and beloved members. His munificent bequest to this society demands our grateful remembrance, and the specimens of his taste for the beautiful, in the highest branch of our science—Landscape Gardening—will command the attention and admiration of all who visit the spot rendered so lovely by the genius of his own elevated mind.

Landscape gardening is a branch of horticulture which the wealthy only in other countries can carry out with success, but in our own extensive and free domains, every industrious and enterprising man, with a love of nature cherished within his breast, may surround himself with the beautiful. Improvements in this department may be seen in the grounds of the late Hon. Theodore Lyman, and Hon. Thomas H. Perkins of Brookline; J. P. Cushing, Esq., of Watertown; Hon. M. P. Wilder and Samuel Downer, jr., Esq., of Dorchester; and Otis Johnson, Esq., of Lynn. Nor can I refrain from noticing the great improvements made in the nurseries generally, but more particularly in the respective establishments of Messrs. Winship of Brighton, and Messrs. Hovey of Cambridgeport. Before I dismiss this subject, allow me to recommend for your consideration the propriety of so amending the By-Laws, as to provide for and establish a professorship of Landscape Gardening.

Persons extensively engaged in the cultivation of fruit for the market, or for their own use, have probably noticed the vast number of insects which prey upon them, or otherwise destroy the fruit, in all its stages, from the opening of the flower bud to the period of its maturity. To counteract these devastations, some persons have placed bottles, partly filled with sweetened water, among the branches of their trees, thus destroying hundreds of thousands of insects without discriminating between friends and foes. This is, in my opinion, a subject worthy of consideration, and which might be placed in the hands of our Professor of Entomology for his investigation; and should he consider it a fit subject for a public lecture, or lectures, he might be solicited to communicate the result of his research in that or some other way to the members of this society and the public. I would further suggest, that the Professor of Botany, and also the Professor of Horticultural Chemistry, be consulted as to the expediency of delivering one or more lectures annually on the respective subjects committed to their charge.

The premiums offered and the gratuities given by the society, for many years past, have produced a laudable competition among the cultivators of excellent vegetables, beautiful flowers and delicious fruits. As a natural result, corresponding improvements have been made in the management of trees, shrubs, plants, &c., in the orchard, garden and conservatory, but not to that extent

probably, that would have been made had the society offered liberal premiums, for the best conducted, most productive and economically manged establishments. I would therefore recommend that premiums be offered, and gratuities be given by the society, under the direction of a committee appointed for that purpose, whose duty it shall be to visit and examine such places as the proprietors thereof shall invite them so to do, at such times, and as often as they may deem proper; without any previous notice having been given to the gardener, superintendent or other person, having charge of the same; that the committee may be able to form a correct judgment, as to the general management and state of cultivation on the premises, and to report to the society the most successful *cultivators at home*, as the other committees report the finest products exhibited *in the Hall* of the society.

The Hall of the society is well located, and in every way adapted for the present weekly and minor exhibitions of the society; but it is already found to be entirely too limited for the larger displays. I would therefore suggest that an arrangement be made to have the *annual exhibition*, in September next, under a tent or tents of ample dimensions, in some suitable place, as near the centre of the city as possible. Such a show would probably give a new impulse to the pursuits of horticulture, and in some measure meet the increasing demands of the public for more information on that subject. The eye, the mirror of the tablet of memory, will ever be, in my opinion, the pioneer in horticultural science; it should be first consulted, by being brought in contact with the useful and beautiful,—that the impressions made might be contemplated, carried away and acted upon. For this purpose a larger hall will soon be necessary; permit me therefore to suggest that our present resources should be husbanded with as much economy as a liberal and progressive management of the affairs of the society will permit, to enable it at no distant day to erect a temple, which shall be an ornament to the city, and in every way adapted to the wants of the society and the public.

When the society shall be provided with a suitable place for all its exhibitions, then, as soon as its funds will permit, the purchase of a piece of land for an experimental garden, so much needed, will, I have no doubt, occupy the attention of the society. Such an establishment would extend the sphere of our labors, and gratify the members by placing at their command further means of usefulness.

The third number of the Transactions of the Society will be published as soon as practicable. This number will complete the first volume, and I have the pleasure to state that a concise history of the society from its commencement to the present time, may be expected in its pages from the pen of its first President, General Dearborn.

Gentlemen: It gives me great pleasure to embrace this opportunity, which your kindness has given me, to present these suggestions for your consideration and action, and to assure you of my wishes to co-operate with you in all your endeavors to promote the usefulness of the society and the advancement of horticultural knowledge.

Upon the conclusion of the address, Mr. Hovey moved its reference to a special committee of seven, who should consider and report what steps ought to be taken in regard to the suggestions therein contained. The motion was adopted, and the following gentlemen were appointed on the committee: Messrs. J. S. Cabot, C. M. Hovey, Cheever Newhall, Joseph Breck, Capt. Wm. R. Austin, Rev. Daniel Leach, and S. W. Cole.

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The Critic Criticised—*Dear Sir*—I am glad to find that a spirit of criticism is awakened among your correspondents, in relation to architectural designs, and I hope to see it followed up by both dilletanti and professors; and let the reflecting part of the public sanction or condemn, weigh and digest. The result must be wholesome, and the Horticulturist will be looked up to as sage authority. But let the critic beware he lay not his foundation for censure upon the quick sands of superficial examination!

In remarking upon the cottage of Mr. Rotch, (Jan number, page 310) the hipped roof is pronounced "objectionable,—cutting off one third of the chamber room, and giving to the elevation, a *squat* appearance." This *appearance* is precisely what I have been taught to consider as desirable in a rural *cottage* residence, though rarely found in country houses. May I say they do not sufficiently *spread themselves*? To me no form is more character than a flat ceiling to a cottage bed room,—and no more pleasing shape than the *peak tent-like* form, *growing out of the construction* of a roof;* also contributing as it does to the "*convenience and pleasantness* of the apartment," by ventilation,—the confined air rising along the upward-sloping sides of the ceiling, and passing through a ventilating register into an air chamber in the peak, still above, and thence to the outward air. The infinite variety which may be given to such a surface, the open timber roofs and groined work of the middle ages sufficiently evince. Loudon questions whether a perfectly unbroken flat ceiling, is in any case admissable. It would be *no question* with Mr. Ruskin. [See "Seven Lamps Architecture," chapter on Truth.]

The critic would have a gable spanning the whole breadth of the house, (instead of the hipped roof,) 41 feet at each end,—totally at variance in the angle, with the gable shown in the engraving, being twice as broad, and only two-thirds as high. What could be more barn-like? (See Scientific English Architect's publications, where *equal angles* are insisted upon, with due subordination of one to another.)

*Running up 12 or 15 ft. high in the highest part of the room.

The roof of the main body of the building is pronounced too high, and would be made subordinate, and an "*inferior appendage!*" The whole *character of design, composition*, and *harmonious arrangement*, lies in making this feature *dominant*, rather than subordinate.

> ——"O, when *degree* is shaked,
> Which is the ladder of all high designs,
> The enterprise is *sick!*"
>
> SHAKSPEARE'S TROILUS.

The Umbrage, (misscalled *Veranda*) is objected to, from its not *returning* on the ends of the building. It might return with increased effect, although it covered the bay window; but, as it serves the good purpose of enabling one walking in its shelter, to command the rear view, and a pleasing fore-ground in the bay, and also spreads the front, and bases the pyramidal form of the whole structure at a minimum expense, how is it shown to be a defect?

The critic, like the Irishman in the play, must be able to *see*, (imperfectly indeed,) as well as *shoot* round the corner when he pronounces the "smaller *gables* to be *dormers*,—*affording imperfect light* to the chambers." These side gables are 10 feet wide, and 8 feet high, according to the scale of the engraving.

I do not understand what is referred to as a *sky light*, since there is none. The *parapet*, (not *balustrade*, as this last term belongs to Italian architecture) defends those who go out upon the roof to enjoy the magnificent view of the sea and shipping in the harbor and surrounding country, from slipping down the steep sides; hence it is not "useless."

With respect to the plan, doubtless "family bed rooms," an ample kitchen in a wing, other back stairs, men servant's bed room, a bathing room, wash room, wood room, out buildings, and other accommodation might add to the convenience of a family, if convenient to the proprietor to *pay* for it. The house is rather *compact* indeed!

> "Masters, *spread* yourselves"
>
> SHAKSPEAR'S DREAM.

Yours, truly, *Alex'r J. Davis. New-York, Jan.* 1850.

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ORIGIN AND IMPROVEMENT OF CULINARY VEGETABLES.—On taking a view of some of our most valuable trees, fruits and vegetables, in their primitive and natural condition, as they have existed—and as they still exist in their native habitats, we cannot fail to be struck with surprise at the extraordinary change which has been effected upon them. From being worthless weeds, some are converted into useful vegetables, and from being vagabonds of the way-side, others have become the most valuable garden productions. I am not at present to tread upon the disputed doctrine *Constitutio Mutare Vegetatio*, which as far as I know still remains an unsettled subject, but merely to notice a few of the most valuable productions of our gardens as objects of culture and economy, with the view of stimulating gardners to do something in the way of effecting similar improvements in others.

Let us begin with some of our common garden vegetables, the majority of which we find to be the offspring of wild plants from the hedge-rows, way-sides, fields and ditches, and some from the sea shores. The Brassica tribe for instance—the cabbage, turnip, &c., are found wild in Britain, and in their native state are the most unpromising things imaginable, wood, hard and tough,—as unlikely things to produce fine cabbages and turnips, as that member of the same family the mustard, is to become an eyrie for an eagle's nest. Those fine cabbages brought into our markets, bear no resemblance to the *B. oleracea* from which they sprung, and yet from this solitary species are all those varieties,—the large white and red cabbage coleworts, green savoys, Brussel sprouts, cauliflowers, brocolies, and about twenty other varieties. The versatility of this tribe of plants is extraordinary indeed; and this will appear the more evident, when we consider that from the white cabbage alone, there are above thirty varieties, differing in their sizes, form, hardiness, and periods of coming to maturity, and though they maintain their general characters throughout, they are in many other respects widely different.

The *Cucurbitaceæ* have also rendered themselves conspicuous, especially in this country, as a valuable family of vegetables, and easily improved.—The most valuable of these are natives of Central Asia; where they are found growing abundantly on the hill sides, and in alluvial deposits. The effects of high culture and hybridization on this family have been indeed wonderful, both as regards product and quality. Compare some of the cucumbers under present cultivation with their original—the *Cucumis sativa*, or the present varieties of melon, squash, &c., with those found in their native habitats.

Again we have the celery, (*Apium graveolens*,) also a British plant, and found growing abundantly on the south western sea shores of England, but in a condition so coarse, rank, and even poisonous, as almost to defy the efforts of cultivation to render it eatable; and requires a long course of cultivation to make suitable for human food! The asparagus, (*Asparagus officinalis*) is also found growing abundantly on the coast of England, and the islands around it; but it is tough, and its taste somewhat pungent. It is found growing in poor sandy soil, generally near the sea; it is small in size, and very different from the same plant in a highly cultivated state.

The parsnip, (*Pastinacea sativa*,) also a native of Britain, and grows wild in calcareous places by the road sides. In its cultivated state, it is one of the most valuable and nutritous roots. The nutritious portion of this root is found on analysis to consist of ninety-nine parts in a thousand, of which nine parts are mucilage, the remaining portion being saccharine matter. Unlike some others, the nutritive qualities of this root are decreased by high

cultivation, except the ground be of a dry calcareous nature. In rich damp soils it acquires a rank taste, and is less sweet and agreeable as an article of diet, than when grown on poor land. In its natural habitat, the root is small and fibrous, not unlike the common dandelion, (*Leontodon taraxacum*) but even in this state is very frranaceous.

Sea kale—(*Crambe maritima.*) This plant is wonderfully improved by cultivation, although it is used in its wild state by the people on the western shores of Britain, where it is plentiful; but in its wild state, it requires no small effort to overcome its acid and disagreeable taste. It is nevertheless much used, and when cut as it springs through the sand, is considered little inferior to asparagus. It springs up generally among sand or gravel, but thrives best where the sand is mixed with alluvial matter, and occasionally watered with the saline spray; hence in cultivating this vegetable in gardens, it is advisable to make the ground to resemble in some degree its natural habitat! The carrot, (*Dacus carota.*) This plant is indigenious to Britain, and is found growing in great abundance by the way-sides and hedges; but so very different is it from the cultivated varieties, that it is doubted by some whether it be in reality the prototype of sorts now grown in our gardens. It is probable that our cultivated carrots are a distinct species, although many are of opinion, that they are merely varieties of the Dacus carota. The former opinion seems supported by the fact, that the wild species has defied all attempts to improve it by cultivation, but this is no conclusive evidence of its being a distinct species from the others.

Beet is found in a wild state in some parts of the south of Europe; but no more like the beet grown in our gardens, than the potatoes of Chili are to the fine farinaceous roots of present culture. So much have these roots improved in size and quality, that their original species is lost sight of.

In the Leguminous family we observe the same improvement in its products. So much is the common pea (*Pisum sativum*) changed from its original condition, that the species from which it sprung, or even its native country, is unknown. At a very early period it formed a staple article of human food, for which it was admirably adapted, since it contains fifty-seven and a half per cent. of nutritive matter. The pea therefore is an invaluable vegetable on account of its nutritive qualities, and ought to find a place in every garden. It might be asked, can nothing more be done to render this family of plants more prolific, earlier, hardier, and higher flavored.

The Lactuca, are a tribe of plants very much circumscribed in their value, and capable of being much more extensively used. Whether the common lettuce of our gardens be one of the three species indigenous to Britain, is unknown; it is certainly, much changed from the lactuca virosa, to which it bears some resemblance. But even within the last few years, this vegetable has been much improved! A vegetable has lately been introduced from China, under the name of "Hoosung," somewhat resembling a lettuce, but which genera of the *Cichoracea* it belongs to, I have had no means of determining; most probably a *Lactuca*, to which it has a strong affinity. I grew some of this vegetable during the past season, but when sent to the table it was rejected as worthless. I am convinced however, this was owing to its being too old before it was used, and also to its being improperly cooked, as I have eaten it at the table of a friend, when it was considered equal, and even superior to asparagus. It should be grown early, and rapidly, on rich soil, and used in a young state, i. e. before the stalk has attained a hard and fibrous texture. A shady, cool spot is the best, where it will not be effected by the mid-day sun. Like all the lettuce family, it becomes exceedingly acrid when grown under the warm sun. I think it may yet become a useful vegetable, and has the merit of being easy grown and very productive. I believe Dr. WENDELL and others have grown it during the past season. Their further experience upon it would be desirable.

In reference to the foregoing plants, it cannot be affirmed that they are incapable of further improvement, and that further attempts to improve them would be hopeless; and even were it so—which it assuredly is not—there is still a very wide field of usefulness among other classes of plants, which, though not less susceptible of improvement, have hitherto been wholly neglected. Our predecessors, as I have here shown, have by their skill and industry reared up a valuable assortment of useful vegetables, and it is upon us who have succeeded them, that devolves the privilege,—and I may say, the obligation—to carry onward this improvement, for most assuredly the resources of nature are far from being exhausted. The hybridization of the most of our common vegetables is an exceedingly easy process, and the gratification of producing something new, is of itself a sufficient compensation for the trouble which it costs. *R. B. Leuchars.*

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ANSWERS TO CORRESPONDENTS.

WASH FOR COTTAGES.—*H. Ely*, (Elyria, O.) French Blue is not, perhaps, to be had, except in the large cities. To make the "gray-stone colour," you may, instead, add to the whitewash burnt amber and lampblack; but the lampblack must first be well dissolved in alcohol, or it will not mix freely with the whitewash.

PRIVET HEDGES.—*M. S.*, (Poughkeepsie, N. Y.) No hedge is so easily raised as this. Cuttings grow with great readiness, if planted early in April; but the most durable hedge is obtained by raising the plants from *seed*, which may be planted either in the fall or spring. Any good garden

soil will answer for the Privet; or, if the hedge is to be grown on ground in a rough state, dig it 18 inches deep, and intermix a dressing of stable manure before setting the plants or cuttings. The latter should be set six inches apart. The hedge may be sheared into any shape after the second year, and needs very little else, except to keep the weeds from growing about it.

MANURES.—*A. R.*, (Lowell, Mass.) The skimmings, or refuse of woolen factories, is a very powerful manure, and is usually wasted, as it heats and takes fire if thrown in heaps. Carried away daily and mixed with muck or common soil, a small quantity of it would render the whole mass excellent manure. *M. S.*, (Poughkeepsie.) We have used the sweepings of blacksmith shops, and agree with you that they are excellent, especially for pear trees.

PNUNING HARDY GRAPES.—You may prune your vines during any suitable weather in February. If the trellises are properly covered with main stems, all you have to do is to cut back the side shoots (of last year's growth,) to a single bud or eye at the base of the shoot. This eye will form the bearing shoot of the coming season.

GRAPE ARBORS.—*M. S.* The semi-circular arbor you refer to, has only the transverse strips across the top,—and finer fruit is grown in this way when fruit alone is the object; but there is no objection to strips upon one or both sides also, when a shelter or screen is also desired. The posts are eight feet above ground, and three and a half below it, and are set six feet apart.

COTTAGE FURNITURE.—*R. L.*, (Indiana.) Cottage furniture, of simple and very tasteful forms, may be had at HENE.SY's warehouse, 25 Brattle-st., Boston, the largest establishment of the kind in the Union. There are also various dealers in New-York and Philadelphia, who have cottage furniture, though not in such variety.

CULTURE OF EXOTICS.—*A. M. D.*, (North Carolina.) *Begonia fuchsioides* likes rich, sandy soil, and a rather warm green-house in winter. While it is growing and blooming give it as much water as it likes; but when at rest, give it very little. *Sparmannia africana* is a strong grower, requiring the least possible care,—only pot-room and plenty of water. It will bear any amount of pruning, or may be allowed to grow into quite a tree. *Clerodendrum speciosissimum* and *Pentas carnea* prefer a rich soil, composed of loam, rotten dung, and sandy peat, and a moist atmosphere. *Columnea crassifolia* likes a dry part of the house, and must not be overwatered. *Habrothamnus elegans* is easily grown in the green-house, in a mixture of rich loam and sand. *Weigela rosea* is a *hardy* deciduous shrub, and, of course, loses its leaves in winter. It grows as easily from cuttings as a currant bush.

PENNSYLVANIA HORTICULTURAL SOCIETY.

The stated meeting of this society was held on Tuesday evening, January 15, 1850. The President in the chair.

The display of plants on the occasion was very creditable for mid-winter. Among the President's collection were the Sobralea macrantha, a *new* plant of a new genus, and the Begonia manicata, of recent introduction, and shown for the first time, with others possessing interest; the Pitcarnia coccinea, Cypripedium venustum, Centradenia rosea, etc. And in Robert Buist's display were Camellia japonica variety, Fielder's Queen of England, Clerodendron viscosum, Spirea prunifolia fl. pl., Correa multiflora rubra, Franciscea latifolia, with many others. By John Lambert's gardender, fine specimens of Strelitzia regina. Azalea alba, Franciscea latifolia, Gongora maculata, Camellia variegata, Begonia alba, Daphne indica odora, D. variegata, etc. Of fruits, Thomas Hancock and John Perkins exhibited fine apples; and H. N. Johnson l'Echasserie pears; and in the President's collection of vegetables were new potatoes, asparagus, mushrooms, sea-kale, radishes, lettuce, endive, &c.; and by Anthony Felten, a rich display of vegetables.

Premiums were awarded as follows:

By the committee on plants and flowers: for the best hothouse plants, three specimens, to Ben Daniels, gardener to C. Cope; for the second best, to Maurice Finn, gardener to John Lambert. For the best green-house plants, three specimens, to Ben Daniels; for the second best, to Maurice Finn. For the best and most interesting collection of plants in pots, to Ben Daniels; for the second best, to Maurice Finn; for the third best, to Robert Scott, foreman to Robert Buist. For the best design of cut flowers, to Ben Daniels; for the second best design, to Peter Raabe. For the best basket bouquets, to Maurice Finn; for the second best, to Ben Daniels.

By the committee on fruits; for the best apples, half peck Newtown Pippins, to Thomas Hancock; for the second best, Romah Stem, to John Perkins. For the best pears, l'Echasserie, to H. N. Johnson.

By the committee on vegetables; for the best and most interesting display of vegetables, by a market gardener, to Anthony Felten; for the best display by an amateur, to Ben Daniels. And a special premium of one dollar for a fine display of cauliflowers, to Anthony Felten.

The committee for establishing premiums reported a schedule for the year 1850, which was adopted.

The library committee submitted their annual report, on the condition of the library, and state "that under the fostering care of the society, it has increased in size until it now numbers eight hundred and fifty volumes, which must be considered a very respectable library, when the branches of literature within which the committee confine its limits, the costliness, value and rarity of many of the works are taken into view; and embracing a number of works of great utility, not accessible in any other institution."

"During the past year forty-seven volumes have been added, of which six were gifts."

The President announced the appointment of committees for the ensuing year.

Messrs. Lippincott, Grambo & Co. presented a neat copying press to the society, for the use of the secretary; when, on motion,

Resolved, That a vote of thanks be tendered for the acceptable gift.

A communication from the secretary of the Massachusetts Horticultural Society, in relation to the time of holding autumnal exhibitions, was read; and the corresponding secretary requested to reply, acknowledging its receipt.

The Annual Meeting was held after the adjournment of the stated meeting, when Elhanan W. Keyser was called to the chair, and George Zantzinger appointed secretary.

A communication from David Landreth was read, declining a re-election as a vice-president, on account of his remote residence.

The following gentlemen were duly elected officers, to serve for the ensuing year:

President—CALEB COPE.

Vice-Presidents—General R. PATTERSON, JAMES DUNDAS, JOSHUA LONGSTRETH, and ELHANAN W. KEYSER.

Treasurer—JOHN THOMAS.

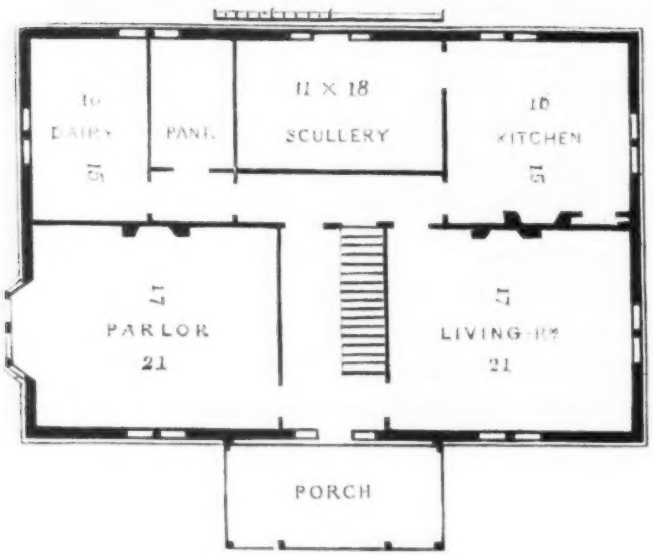
Corresponding Secretary—THOMAS C. PERCIVAL.

Recording Secretary—THOMAS P. JAMES.

Adjourned.

THO. P. JAMES,
Recording Secretary.

A COUNTRY HOUSE.



PRINCIPAL FLOOR.